# बिहार प्रदेश के स्वैक्षिक संस्थओं के अनौपचारिक शिक्षा के क्षेत्र में कौर्यरत वरिष्ठ कार्यकर्ताओं का विषय-वस्तुगत आधारित उन्नमुखीकरण कार्यक्रम

स्थान :- 'लोकसेवायतन' ग्राम,पो0- नीमडीह, जिला- पश्चिमी सिंहभूम (बिहार) अविध :- 13 नवम्बर से 17 नवम्बर 1999 तक

# प्रतिवेदन

सम्पादित
डाँ० पुरूषोत्तम कुमार
कार्यक्रम समन्यवक
परिवीक्षण
श्री ईश्वर चन्द्र
प्रवक्ता सलेक्सन ग्रेड
मार्गदर्शन
प्रो0 अनिल चन्द्र बैनर्जी



अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा विभाग राष्ट्रीय शैक्षिक अनुसंधान एवं प्रशिक्षण परिषद् श्री अरविन्द मार्ग, नई दिल्ली- 110016

# विषय-सूची

٦.	भूमिक	Ţ	7
2.	उन्मुख	ीकरण कार्यक्रम के उदेश्य	1
3.	उन्मुर्ख	ीकरण कार्यक्रम के प्रतिभागी	2
4.	उदघा	टन सत्र	3
5.	अनौप	वारिक शिक्षा के परियोजना अधिकारियों, पर्यवेक्षको	7
	एवं अ	नुदेशकों के उत्तरदायित्व एवं कर्तव्य	
6.	अनुभव	ों का आदान-प्रदान	8
7.	प्राथमि	क स्तर पर न्यूनतम अधिगम स्तर	8
8.	ਧਰਜ-ਾ	गाठन प्रविधि	10
	क.	भाषा	10
	ख.	गणित	11
	ग.	पर्यावरण अध्ययन	17
9.	पाठय	सम्बन्धित अनुदेशात्मक सामग्रियों का विश्लेषण	23
	(i)	विषय-वस्तु का चयन	24
	(ii)	विषय-वस्तु का समायोजन	24
	(iii)	विवरण	25
	(iv)	दृष्टान्त	25
	(v)	अभ्यास	25
	(vi)	उत्तर	26
	(vii)	मुल्यांकन सामंग्री	26
10.	अनौप	वारिक शिक्षा केन्द्र के बच्चों की उपलब्धियों का मूल्यांकन	27
11.	समाप	न सत्र .	28
		परिशिष्ट (Appendix)	
1.	क.	परियोजना अधिकारियों के उत्तरदाइत्व एवं कर्तव्य	30
	ख.	पर्यवेक्षकों के उत्तरदाइत्व एवं कर्तव्य	31
	ग.	अनुदेशकों के दाइत्व एवं कर्तव्य	32
2.	प्राभमि	क स्तर पर न्यूनतम अधिगम स्तर	33
	क.	भाषा	33
	ख.	गणित	37
	ग्.	पर्यावरण अध्ययन	45
3.	प्रतिभा	गी स्वैक्षिक संस्थाओं की वस्तु-स्थिति	54
4.	अनौप	वारिक शिक्षा केन्द्र के बच्चों का मूल्यांकण	116
5.	अच्छे :	प्रश्नों की विशेषता	121
6.	प्रश्नों	के प्रकार	125
7.		म तालिका	133
8.	प्रतिभा	गियों की सूची	136

#### प्रस्तावना

भारत में प्राथमिक शिक्षा के सार्वजनीकरण के उदेश्यों की प्राप्ति हेतु केन्द्रीय सरकार द्वारा प्रायोजित अनौपचारिक शिक्षा योजनाओं को प्रभावी रूप से लागू करने में जो स्वैक्षिक संस्थाये कार्यरत है तथा इस प्रकार की स्वैक्षिक संस्थाये, जो प्राथमिक शिक्षा के क्षेत्र में नवाचार एवं प्रायोगिक परियोजनाओं में कार्यरत हैं साथ ही मानव संसाधन विकास मंत्रालय भारत सरकार द्वारा आर्थिक अनुदान प्राप्त करते है, अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा विभाग राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद नई दिल्ली, प्रतिवर्ष उन स्वैच्छिक संस्थाओं के अनौपचारिक शिक्षा के निमित्त कार्यरत वरिष्ठ कार्यकर्ताओं के प्रशिक्षण हेतु बहुत से प्रशिक्षण कार्यक्रमों का आयोजन करता हैं। इन प्रशिक्षण कार्यक्रमों द्वारा अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा विभाग रा.शै.अ.प्र.परिषद, स्वैक्षिक संस्थाओं के अनौपचारिक शिक्षा के क्षेत्र मे कार्यरत वरिष्ठ कार्यकर्ताओं के कार्यक्षमता के ''आधार'' को और सुदढ करता है। इन प्रशिक्षण कार्यक्रमों में मुख्यतः पठन-पाठन सामग्रियों का विश्लेषण एवं उनका विकास, सहायक सामग्रियों का निर्माण, परीक्षण-प्रश्न तथा सिखने एवं मूल्यांकन के विभिन्न विधियों से सम्बन्धित प्रशिक्षण दिया जाता है।

इस उन्नमुखीकरण कार्यक्रम में भारत सरकार द्वारा प्रायोजित अनौपचारिक शिक्षा योजना को क्रियावान्वित करने वाले स्वैक्षिक संस्थाओं के, शामिल प्रतिनिधियों में परस्पर अनुभवों एवं जानकारियों का आदान-प्रदान हुआ। यह उन्नमुखीकरण कार्यक्रम उन सभी शैक्षिक समस्याओं, जो अनौपचारिक शिक्षा योजना को क्रियावान्वित करने में बाधा उत्पन्न करती है, की पहचान एवं उनके निवारण में सहायक सिद्ध हुआ। साथ ही साथ प्रतिभागियों को वैकल्पिक एवं नवाचार शिक्षा के बदलते स्वरूप में उनके भविष्य के योगदान से उन्हें परिचित कराया गया।

डॉ॰ पुरूषोत्तम कुमार कार्यक्रम समन्वयक ने कार्यक्रम प्रपत्रक के निर्माण, प्रशिक्षण कार्यक्रम के आयोजन निमित्त कार्यक्रम सूची के विकास एवं कार्यक्रम के आयोजन के साथ ही प्रशिक्षण कार्यक्रम से सम्बन्धित सभी शैक्षिक क्रियाकलापों, जिस में प्रतिवेदन तैयार करने एवं सम्पादन कार्य भी सम्मिलित है, श्री ईश्वर चन्द्र (प्रवक्ता सलेक्सन ग्रेड) के मार्ग दर्शन में सम्पन्न किया।

डॉ॰ पुरूषोत्तम कुमार, कार्यक्रम समन्वयक एवं श्री ईश्वर चन्द्र (जिन्होंने डॉ॰ पुरूषोत्तम कुमार का इस उन्नमुखीकरण कार्यक्रम में आवश्यकतानुसार मार्गदर्शन किया) मेरे विशेष घन्यवाद एवं हार्दिक प्रशंसा के पात्र हैं जिन्होने इस उन्नमीखीकरण कार्यक्रम को बहुत ही उत्कृष्ट एवं क्रमबद्ध तरीके से सम्पन्न किया।

श्री दीपांकर राय, सचिव लोकसेवायतन, नीमडीह जिला पश्चिमी सिंहभूम (बिहार) को मैं हार्दिक धन्यवाद दूगां, जिन्होंने इस उन्नमुखीकरण कार्यक्रम का शिक्षण-क्रम निदेशक रहकर प्रशिक्षण से सम्बन्धित सभी तरह की मैतिक सुविधायें उपलब्ध कराते हुए प्रतिभागियों के खाने- पीने एवं ठहरने की व्यवस्था बहुत ही उत्तम एवं प्राकृतिक वातावरण में किया।

किसी भी प्रशिक्षण कार्यक्रम की सफलता, कार्यक्रम समन्यवक के साथ-साथ उस प्रशिक्षण के संसाधन व्यक्तियों की कुशलता पर भी निर्मर करता है। इस लिए श्री निंकुज प्रकाश नारायण, उप-सचिव सह प्रामर्शदाता, अनौपचारिक शिक्षा, राज्य संसाधन केन्द्र पटना बिहार, श्री संजय कुमार, सायक निदेशक,जन-शिक्षा,

बिहार सरकार पटना,श्री चन्दन सेन 'अध्यक्ष' लोकसेवायतन, नीमडीह, जिला पश्चिमी सिंहभूम (बिहार) को मैं हार्दिक धन्यवाद दूंगा जिन्होंने इस उन्नमुखीकरण कार्यक्रम में संसाधन-व्यक्ति के रूप में कार्य करके इस उन्नमुखीकरण कार्यक्रम को उत्कृष्ट एवं सफल बनाया । अन्त में विमिन्न संस्थाओं से आये हुए उन सभी प्रतिभागियों को धन्यवाद देता हूं, जिन्होंने अपने अमूल्य जानकारियों एवं क्षेत्रीय अनुभवों को एक दूसरे से आदान-प्रदान एवं विचार-विमर्श करके इस उन्नमुखीकरण कार्यक्रम को सफल बनाया।

विशेष रूप से श्री एच.सी. चन्दोला, अनुभाग अधिकारी, श्रीमती सुषमा दर्शन, सहायक कार्यक्रम समन्वयक जिनके द्वारा सभी तरह की प्रशासिकय सुविधाए उपलब्ध करायी गयी साथ ही श्री ओम प्रकाश ध्यानी, टंकक जिन्होंने निर्धारित समय के अन्दर ही प्रतिवेदन का कम्पयूटर टंकण कार्य पूरा कर दिया, इन लोगों को हार्दिक धन्यवाद देना अपना नैतिक कर्तव्य समझता हूं।

मुझे पूर्ण विश्वास है कि यह प्रतिवेदन अनौपचारिक शिक्षा के क्षेत्र में कार्यरत संस्थाओं एवं कार्यकर्ताओं के लिए उपयोगी सिद्ध होगी। पाठकों से उनके अनुशंसा एवं राय की अपेक्षा रहेगी।

> प्रो.अनिल चन्द्र बैनर्जी विभागाध्यक्ष अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा विभाग एन.सी.ई.आर.टी., श्री अरविन्द मार्ग, नई दिल्ली-110016

# बिहार प्रदेश के स्वैक्षिक संस्थाओं के अनौपचारिक शिक्षा के क्षेत्र में कार्यरत वरिष्ठ कार्यकर्ताओं का विषय-वस्तुगत उन्नमुखीकरण कार्यक्रम

स्थान:-''लोकसेवायतन'' ग्रा.पो. - नीमडीह जिला- प. सिंहभूम (बिहार)

अवधि:- 13 से 17 नवम्बर 1999 तक

### प्रतिवेदन

# भूमिकाः-

अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा विभाग (राष्ट्रीय शैक्षिक अनुसंघान और प्रशिक्षण परिषद) नई दिल्ली 110016, प्रत्येक वर्ष कई उन्नमुखीकरण कार्यक्रमों का आयोजन वैसी स्वैक्षिक संस्थाओं के वरिष्ठ कार्यकर्ताओं के लिए करता है, जो केन्द्रीय सरकार द्वारा प्रायोजित प्राथमिक शिक्षा का सार्वजनीकरण नीति को क्रियान्वित करने के निमित्त अनौपचारिक एवं वैकल्पिक शिक्षा, तथा नवाचार एवं प्रायोगिक परियोजना को चला रही है। साथ ही इन परियोजनाओं के सचालन हेतु उन्हें मानव संसाधन विकास मंत्रालय भारत सरकार द्वारा आर्थिक अनुदान प्राप्त होता है। अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा विभाग इन उन्नमुखीकरण कार्यक्रमों के माध्यम से अनौपचारिक शिक्षा के क्षेत्र में कार्यरत स्वैक्षिक संस्थाओं को संसाधनयुक्त एवं मजबूती प्रदान करता है।

भारत सरकार की अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा योजना, सरल एवं प्रभावी रूप से क्रियान्वित करना तभी सम्भव हो सकता है, जब कि स्वैक्षिक संस्थाओं के वरिष्ठ कार्यकर्ता अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा के सभी पहलुओं की जानकारी के साथ-साथ अनौपचारिक शिक्षा केन्द्रों का सचालन, अवलोकन एवं पर्यवेक्षण, न्यूनतम अधिगम स्तर की उपलब्धि, विषय-वस्तुगत शिक्षण पद्विति की जानकारी तथा अनौपचारिक शिक्षा केन्द्रों के बच्चों के उपलब्धियों का मूल्याकन आदि कार्यों को करने में प्रशिक्षित हों।

उपरोक्त मुद्दों को ध्यान में रखतें हुए अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा विभाग ने मानव संसाधन विकास मंत्रालय भारत सरकार द्वारा अनुदान प्राप्त करने वाले बिहार राज्य के स्वैक्षिक संस्थाओं के यरिष्ठ कार्यकर्ताओं के लिए पांच दिवसीय, "आवासीय" (13 नवम्बर से 17नवम्बर 1999) विषय-वस्तुगत उन्नमुखीकरण कार्यक्रम का आयोजन किया। इस उन्नमुखीकरण के अन्तर्गत पठन-पाठन सामग्रियों का विकास एवं विश्लेषण, सहायक सामग्रियों का उपयोग, परिक्षण-प्रश्न का विकास, अनौपचारिक शिक्षा केन्द्रों के बच्चों की उपलब्धियों का मुल्यांकण तथा शिक्षण प्रक्रिया को रूचिपूर्ण बनाने के तरीकों से सम्बन्धित प्रशिक्षण दिया गया। इस के अतिरिक्त प्रतिभागियों ने परस्पर एक दूसरे की जानकारियों एवं अनुभवों से लाभ उठाया।

**उन्नमुखीकरण कार्यक्रम के उदेश्य** :- इस विषय-वस्तुगत उन्नमुखीकरण कार्यक्रम के निम्नलिखित मुख्य उदेश्य थे।

- 1. भारत सरकार के अनौपचारिक शिक्षा योजना के क्रियान्वयन में कार्यरत स्वैक्षिक संस्थाओं के मध्य, उनके जानकारियो एवं अनुभवों के परस्पर आदान-प्रदान हेतु उपयुक्त मंच उपलब्ध कराना।
- केन्द्रीय सरकार द्वारा प्रायोजित अनौपचारिक शिक्षा योजना को चलाने वाली स्वैक्षिक संस्थाओं के समक्ष आने वाली शैक्षिक समस्याओ एवं कठिनाइयों की पहचान करना।

- : 2 : शिक्षण के लिए उपयोग की जाने वाली पठन-पाठन सामग्रियों का विश्लेषण तथा अनौपचारिक शिक्षा के 3. अनुदेशको के लिए उपयुक्त सामग्रियों का विकास करना।
- विषय-वस्त्गत शिक्षण पद्धति तथा अनौपचारिक शिक्षा केन्द्रों के बच्चों की दक्षता आधारित परिक्षणों के 4. आधार पर उनकी उपलब्धियों के मूल्याकन के संदर्भ में प्रतिभागियो को प्रशिक्षित करना।

यह उन्नमुखीकरण कार्यक्रम मानव संसाधन विकास मंत्रालय भारत सरकार द्वारा निर्मित न्यूनतम अधिगम स्तर प्रलेख एवं अनौपचारिक शिक्षा के क्षेत्र में कार्यरत परियोजना अधिकारी, निरीक्षक, एवं अनुदेशकों के लिए, अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा विभाग (राष्ट्रीय शैक्षिक अनुसंघान एवं प्रशिक्षण परिषद) नई दिल्ली द्वारा निर्मित प्रशिक्षण पैकेज पर आधारित था।

**उन्नमुखीकरण कार्यक्रम के प्रतिभागी:-** इस उन्नमुखीकरण कार्यक्रम में भाग लेने के लिए अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा विभाग ने बिहार राज्य के पैतालिस (45) स्वैक्षिक संस्थायें जो अनौपचारिक शिक्षा के क्षेत्र में कार्य करने हेतु मानव संसाधन विकास मत्रालय भारत सरकार द्वारा अनुदान प्राप्त करती है, को आमंत्रण-पत्र भेजा था। उन स्वैक्षिक संस्थाओं में से सैतीस (37) संस्थाओं ने अपने एक-एक प्रतिनिधि तथा एक स्वैच्छिक संस्था (पी.डी.टी.) ने अपने दो प्रतिनिधियों को भेजा था, जिस मे से अपने एक प्रतिनिधि का स्वयं उस संस्था ने खर्च वहन किया। उन्नमुखीकरण कार्यक्रम में भाग लेने आये सभी प्रतिभागी अपनी-अपनी संस्था के वरिष्ठ कार्यकर्ता (अध्यक्ष, सचिव,परियोजना अधिकारी, सहायक परियोजना अधिकारी, परियोजना समन्यवक)थे।

इस उन्नमुखीकरण कार्यक्रम में डॉ. पुरूषोत्तम कुमार (कार्यक्रम समन्यवक) श्री ईश्वर चन्द्र, प्रवक्ता (सलेक्शन ग्रेड) राष्ट्रीय शैक्षिक अनुसंघान एवं प्रशिक्षण परिषद नई दिल्ली 110016 के अतिरिक्त विशेष अतिथी के रूप में एक तथा तीन (3)प्रतिभागी, संसाधन व्यक्तियों के रूप में अपना योगदान दिया।

#### विशेष अतिथी

श्री पसाददास गुप्ता 1. परियोजना समन्यवक एम.एन.बी ई. संस्थान पो. माझीहीरा, जिला-पुरूलिया (प. बंगाल)

## संसाधन व्यक्ति

- 2. श्री निकुज प्रकाश नारायण उप-सचिव सह परामशी अनौपचारिक शिक्षा, राज्य संसाधन केन्द्र पटना (बिहार)
- श्री सजय कुमार 3. सहायक निदेशक जन-शिक्षा बिहार सरकार पटना
- श्री चन्दन रोन 4. अध्यक्ष 'लोकसेवायतन' पो - नीमडीह, जिला- प. सिंहभूम (बिहार)

डॉ0 पुरूषोत्तम कुमार, प्रवक्ता अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा विभाग, राष्ट्रीय शैक्षिक अनुसंघान एवं प्रशिक्षण परिषद, नई दिल्ली-110016 ने इस उन्नमुखीकरण कार्यक्रम के सभी शैक्षिक क्रियाकलापों का समन्वय किया। श्री ईश्वर चन्द्र प्रवक्ता, (सलेक्शन ग्रेड) ने पाँचों दिन इस उन्नमुखीकरण कार्यक्रम मे रहकर गणित विषय में संसाधन व्यक्ति के रूप में अपना योगदान दिया। इस उन्नमुखीकरण कार्यक्रम के सभी प्रतिभागियों की सूची इस प्रतिवेदन के परिशिष्ट - 8 में सन्नहित है।

#### उद्घाटन सत्रः-

इस उन्नमुखीकरण कार्यक्रम का आयोजन अनौपचारिक एवं वैकल्पिक विद्यालीय शिक्षा विभाग (राष्ट्रीय शैक्षिक अनुसंघान एवं प्रशिक्षण परिषद) नई दिल्ली द्वारा पूर्व निर्धारित समय पर शुरू किया गया। प्रो. अनिल चन्द्र बैनर्जी, विभागाध्यक्ष (अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा विभाग) के निर्देशन एवं सहयोग से पूर्व मे ही कार्यक्रम-तालिका का निर्माण कर लिया गया था। यह उन्नमुखीकरण कार्यक्रम पूर्णतः आवासिय प्रकृति का था, जो प्रातः 8.30 बजे से प्रारंभ होकर शाम 7.00 बजे तक चलता था।

श्री दीपॉकर राय, 'सचिव' लोकसेवायतन, नीमडीह जिला- प.सिंहभूम (बिहार) ने कार्यक्रम में शामिल सभी प्रतिभागियों का स्वागत किया, तत्पश्चात डॉ. पुरूषोत्तम कुमार,(कार्यक्रम समन्वयक) ने राष्ट्रीय शैक्षिक अनुसंघान एवं प्रशिक्षण परिषद नई दिल्ली की भूमिका तथा क्रिया-कलापों का (विशेषतः अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा विभाग)का विवरण प्रस्तुत किया। उन्होंने इन उन्नमुखीकरण कार्यक्रम के उद्देश्यों तथा इस उन्नमुखीकरण के निर्धारित अवधि में उन उद्देश्यों को किस प्रकार प्राप्त किया जाएगा, इसको स्पष्ट किया। इस के पश्चात डॉ. कुमार ने अनौपचारिक शिक्षा के क्षेत्र में आने वाली कुछ मुख्य किवनाइयों का वर्णन किया जो निम्नलिखित हैं:-

- 1. अनौपचारिक शिक्षा केन्द्रों में विभिन्न आयुवर्ग के बच्चे एक ही स्थान एवं एक ही समय में साथ-साथ पढ़तें है। दूसरे शब्दों में कह सकते है कि अनौपचारिक शिक्षा केन्द्रों के बच्चों की दक्षता-स्तर में एकरूपता नही होती दूसरी ओर औपचारिक विद्यालयों में लगभग समान आयुवर्ग तथा समान दक्षता-स्तर वाले बच्चे एक कक्षा में पढतें हैं।
- 2. अनौपचारिक शिक्षा केन्द्रों के बच्चों की पढ़ने की अविध (दो या तीन घंटे प्रतिदिन)होती है जो कि औपचारिक विद्यालयों के बच्चों की पढ़ने की अविध से बहुत ही कम है।
- 3. पाठन प्रक्रिया में अनौपचारिक शिक्षा केन्द्र के बच्चों को उनके अभिभावकों का सहयोग बहुत ही कम मिलता है, कारण कि ये बच्चें प्रथम पीढी के छात्र होते है।
- 4. अनौपचारिक शिक्षा केन्द्रों के अधिकतर बच्चें अपने अभिभावकों के कार्यों में हाथ बटाते है, इसलिए इनके गृह -कार्य (अनुदेशकों द्वारा दिया गया) के पूर्ण होने की संभावना बहुत कम होती है।
- औपचारिक विद्यालयों के शिक्षकों की तुलना में अनौपचारिक शिक्षा केन्द्रों के अनुदेशकों की शिक्षा एवं प्रशिक्षण निम्न होता है।
- 6. औपचारिक विद्यालयों के शिक्षकों की तुलना में अनौपचारिक शिक्षा केन्द्र के अनुदेशकों का वेतन/मानदेय बहुत ही कम होता है, जब कि कार्यों का बोझ बहुत ज्यादा होता है।

इन किमयों के बावजूद भी अनौपचारिक शिक्षा केन्द्र के बच्चों से उन दक्षताओं की अपेक्षा की जाती है, जो कि उन्हीं के स्तर पर पढ़ रहें औपचारिक विद्यालयों के बच्चों में विद्यमान होती है। इस उन्नमुखीकरण कार्यक्रम का उपरोक्त प्रकरण, एक प्रमुख बिन्दु रहा।

इन कठिन प्रकरणों को दूर करने के लिए अनौपचारिक शिक्षा में कुछ सुविधाएं भी वर्तमान है। उदाहरण के लिए:-

- 1. अनौपचारिक शिक्षा केन्द्र के बच्चों में औपचारिक विद्यालयों के बच्चों की तुलना में अधिक आत्म विश्वास होता है, कारण कि अनौपचारिक शिक्षा केन्द्र के बच्चों को विभिन्न प्ररिस्थितियों में कार्य करने का अनुभव होता है। यही कारण है कि अनौपचारिक शिक्षा केन्द्र के बच्चें सीखने की प्रक्रिया में अधिक सामर्थ होते है और शीघ्र सीख जाते हैं।
- 2. औपचारिक विद्यालयों के शिक्षकों की तुलना में अनौपचारिक शिक्षा केन्द्र के अनुदेशकों को बाहर से अधिक सहयोग मिलते रहते हैं। उन्हें पर्यवेक्षक/ परियोजना अधिकारी, जन-समुदाय से शैक्षिक एवं अन्य सुविधाएं मिलती रहती है।
- 3. औपचारिक विद्यालयों के शिक्षकों की तुलना में अनौपचारिक शिक्षा केन्द्र के अनुदेशकों को प्रशिक्षण/उन्नमुखीकरण की अधिक सुविधाएं मिलती रहती हैं।
- 4. अनौपचारिक शिक्षा केन्द्र के अनुदेशकों को समय-समय पर पर्यवेक्षकों/परियोजना अधिकारियों द्वारा बना-बनाया पठन-पाठन सामग्रि उपलब्ध होती है, जबिक औपचारिक विद्यालयों के शिक्षकों को बहुत कठिनाई से प्राप्त होता है।

भारत सरकार द्वारा निर्धारित प्राथमिक शिक्षा का सार्वजनीकरण लक्ष्य प्राप्ति की चुनौती को स्वीकार करते हुए, वर्तमान परिस्थितियो का सही रूप से उपयोग किस प्रकार किया जाए, यही राष्ट्रीय शैक्षिक अनुसंधान एवं प्रशिक्षण परिषद का मुख्य लक्ष्य बन गया है।

श्री ईश्वर चन्द्र, प्रवक्ता (सलेक्शन ग्रेड) ने अपने उद्घाटन-भाषण में भारत सरकार द्वारा चलाई गई बहुत सी जन - कल्याण योजनाए जैसे - अनौपचारिक शिक्षा, जिला प्राथमिक शिक्षा कार्यक्रम, दोपहर का भोजन योजना इत्यादि के असफल होने पर क्षोभ व्यक्त किया। उन्होंने शिक्षा नीति के संदर्भ में निकट भविष्य में होने वाले परिवर्तनों का उल्लेख किया जो निम्नलिखित है:-

1. अनीपचारिक शिक्षा कार्यक्रम को सर्वशिक्षा अभियान के अन्तर्गत लाया जाएगा। इसके अन्तर्गत प्राथमिक शिक्षा से सम्बन्धि सभी शिक्षा कार्यक्रम जैसे- औपचारिक शिक्षा, अनीपचारिक शिक्षा, वैकल्पिक शिक्षा, टी.एल.सी., मध्यावकाश भोजन योजना, डी.पी.ई.पी., ओ.बी. इत्यादि आयेंगे। सर्वशिक्षा अभियान के अन्तर्गत अनीपचारिक शिक्षा का नाम 'वैकल्पिक एवं नवाचार शिक्षा रखा जाएगा।

- 2. अनौपचारिक शिक्षा कार्यक्रम के प्रगति में बाधक किमयों को हटाया जाएगा।
- 3. अनौपचारिक शिक्षा को प्राथमिक (कक्षा 5 ) स्तर से बढ़ाकर उच्च प्राथमिक (कक्षा'8 ) स्तर तक बढ़ाया जाएगा
- 4. अनौपचारिक शिक्षा/वैकल्पिक एवं नवाचार शिक्षा को समानांतर शिक्षा के रूप में औपचारिक शिक्षा के समान स्वीकार किया जाएगा।
- 5. प्रत्येक बालक औसतन वार्षिक खर्च रू. 1100/- से रू. 1300/- के बीच होने की संभावना है।
- 6. प्रशासनिक दृष्टि से इसका विकेन्द्रीकरण जिला स्तर तक किया जाएगा।
- 7. पूरे शिक्षा कार्यक्रम का प्रशासनिक अवलोकन एवं मूल्यांकन कार्य एक ही सामान्य संस्था करेगी।
- 8. अनौपचारिक शिक्षा और औपचारिक शिक्षा दोनों को समान रूप से वित्तीय सहायता दी जाएगी।
- 9. परियोजना के उद्देश्यों को युद्धस्तर पर निर्धारित समय में पूरा किया जाएगा।
- 10. अनौपचारिक शिक्षा एवं औपचारिक शिक्षा, दोनो का उद्देश्य बच्चों को आठवीं कक्षा तक शिक्षा प्राप्त करना है।
- 11. तथ्य यह है कि सरकारी एवं गैर सरकारी संस्थाएं दोनो को मिलकर शिक्षा के विस्तार के लिए कार्य करना है।
- 12. शिक्षा को मौलिक अधिकार का दर्जा दिया जाएगा।
- 13. जन-जातिय गाँव/बस्तियों में यदि औपचारिक विद्यालय खोलना आर्थिक रूप से संभव नहीं है, वहाँ शैक्षिक संस्थाएँ, वहाँ के लोगों की शिक्षा की कमी को अनौपचारिक शिक्षा केन्द्रों के द्वारा पूरा करेंगी।
- 14. अनौपचारिक शिक्षा केन्द्र के अनुदेशको को अब "अर्धशिक्षक" कहा जाएगा तथा उनको 1000क्रपए प्रति माह मानदेय दिया जाएगा।
- 15. मानव संसाधन विकास मंत्रालय द्वारा क्तिय सहायता देने के लिए मौजूद स्वैच्छिक संस्थाओं की समीक्षा चल रही है।
- 16. स्वैच्छिक संस्थओं का अपना कार्य, लगन पूर्वक करना होगा साथ ही अपने निष्पादन एवं उत्तरदायित्वों को तेजी से बढाना होगा।
- 17. सामान्य स्थितियों में स्वैच्छिक संस्थओं को 5 या 6 वर्ष से अधिक समय के लिए अनुदान नहीं दिया जाएगा, उन्हें स्वयं के वित्तीय साधनों को बढ़ाने होगें साथ ही अनुदानों की प्राप्ति में आने वाली बाधाओं एवं कठिनाइयों को खत्म किया जाएगा।
- 18. कठोर नियमों एवं जॉच से गुजरने के बाद ही नवाचार एवं प्रायोगिक परियोजनाओं को चलाने की अनुमति मिल पाएगी।

- 19. अनौपचारिक शिक्षा अनुदेशको की नियुक्ति के लिए न्यूनतम शैक्षिक योग्यता एस.एस.एल.सी. होगी। नए नियुक्त किए गए अनुदेशकों को 30 दिन का प्रशिक्षण, उनके अपने खर्च पर दिया जाएगा।
- 20. अनौपचारिक शिक्षा अनुदेशकों का चयन एवं नियुक्ति ग्राम शिक्षा समिति के द्वारा किया जाएगा। स्वैच्छिक संस्थाओं को अपनी मर्जी से अनुदेशकों की नियुक्ति करने की अनुमित नहीं दी जाएगी।
- 21. स्वैच्छिक संस्थाओं द्वारा की गयी छोटी सी गलती के परिणामस्वरूप उनको मिलने वाले अनुदान को समाप्त किया जाएगा। जो संस्थाए इमानदारी से अपने कार्यों को करेगी, उनके लिए अनुदान की प्रक्रिया को सरल बनाते हुए उनके परेशानियों को दूर किया जाएगा।
- 22. अनौपचारिक शिक्षा कार्यक्रम के अवलोकन एवं निगरानी के लिए ग्राम समुदाय को व्यवहारिक रूप से सम्मिलित किया जाएगा।
- 23. अनौपचारिक शिक्षा और औपचारिक शिक्षा के बच्चों की आठवीं कक्षा की परिक्षा एक ही स्तर पर, एक ही साथ होगी, अथवा अनौपचारिक शिक्षा केन्द्र के बच्चें, राष्ट्रीय मुक्त विद्यालय द्वारा आयोजित होने वाले आठवीं कक्षा की परीक्षा दे सकते हैं।
- 24. औपचारिक विद्यालयों के शिक्षकों को अनौपचारिक शिक्षा के क्रियाकलापों में भी सम्मिलित होना होगा।
- 25. अनौपचारिक शिक्षा के अन्तर्गत उच्च प्राथमिक केन्द्रों के अनुदेशकों की न्यूनतम शैक्षिक योग्यता बारहवी कक्षा (इंटर मीडियट) पास होगी।

## अनोपचारिक शिक्षा के परियोजना अधिकारियों, पर्यवेक्षकों एवं अनुदेशकों के उत्तरदायित्व एवं कर्तव्य:-

डॉ. पुरुषोत्तम कुमार ''कार्यक्रम समन्वयक'' ने अनौपचारिक शिक्षा के कार्यकर्ताओं के उत्तरदायित्व एवं कर्तव्यों पर विवेचना प्रारंभ किया। राष्ट्रीय शैक्षिक अनुसंधान एवं प्रशिक्षण परिषद नई दिल्ली द्वारा बनाए गए परियोजना अधिकारी, पर्यवेक्षक एवं अनुदेशक संदर्शिकाओं के आधार पर उन्होंने श्यामपट पर अनौपचारिक शिक्षा के कार्यक्रताओं के उत्तरदायित्व एवं कर्तव्यों की सूची बनाई। तदोपरांत प्रतिभागियों ने तीन समूहों में बैठकर कार्यक्रम समन्वयक द्वारा लिखी गई सूची पर विचार विमर्श किया एवं उस सूची में यदि कोई उत्तरदायित्व एवं कर्तव्य रह गया तो उसे सम्मिलित किया। परियोजना अधिकारी, पर्यवेक्षक एवं अनुदेशक के उत्तरदायित्व एवं कर्तव्यों की सूची का अतिम रूप परिशिष्ठ -1 में दिया गया है।

मानव संसाधन विकास मंत्रालय के प्रतिनिधि की अनुपस्थिति में स्वैक्षिक संस्थाओं की सभी प्रशासकीय समस्याओं पर चर्चा नहीं की जा सकी। यद्यपि मानव संसाधन विकास मंत्रालय से अनुरोध किया गया था कि वो अपने एक प्रतिनिधि को कम से कम एक दो दिन के लिए इस उन्नमुखीकरण कार्यक्रम में भेजे, फिर भी किसी कारण से मंत्रालय ने स्वैक्षिक संस्थाओं की समस्याओं पर विवेचना के लिए किसी भी प्रतिनिधि को नहीं भेजा।

स्वैक्षिक संस्थओं की शिकायतों में मुख्य शिकायत यह थी कि मानव संसाधन विकास मत्रालय से परियोजना के स्वीकृत हो जाने के बाद भी अनुदान मिलने में बहुत कठिनाई होती है। स्वैक्षिक संस्थाओं को मंत्रालय का कई कई बार चक्कर लगाना पडता है, जिसके कारण आर्थिक एवं परियोजना शुरू करने में परेशानी होती है। अधिकतर प्रतिभागी यह चाहते थे कि अनौपचारिक शिक्षा के कार्यकर्ताओं का वेतन/मानदेय निम्नलिखित होना चाहिए।

अनुदेशक — रू. 1000/- प्रतिमाह पर्यवेक्षक ---- रू. 1750/- प्रतिमाह परियोजना अधिकारी ---- रू. 5500/- प्रतिमाह

कुछ स्वैक्षिक संस्थाए चाहती थी कि हर 50 अनौपचारिक शिक्षा केन्द्रों के लिए एक नया कार्यकर्ता (सहायक परियोजना अधिकारी) की नियुक्ति की जाए जिसका वेतन/मानदेय रू. 4000/- प्रतिमाह हो।

# अनुभवों का आदान प्रदान:-

इस सत्र के अन्तर्गत प्रतिभागियों ने अपनी अपनी स्वैक्षिक संस्थाओं के क्रियाकलापों एवं अनुभवों को प्रस्तुत किया। परन्तु समयाभाव के कारण प्रतिभागी अपनी-अपनी संस्थाओं के क्रियाकलापों की विस्तृत जानकारी नहीं दे पाए। अनौपचारिक एवं वैकलिपक विद्यालयी शिक्षा विभाग (राष्ट्रीय शैक्षिक अनुसंघान एवं प्रशिक्षण परिषद) ने ''स्वैक्षिक संस्थओं की वस्तु स्थिति'' परफोर्मा बनाकर पहले ही स्वैक्षिक संस्थाओं को भेज दिया था। साथ ही संलग्न पत्र में लिख दिया गया था कि उक्त उन्मुखीकरण कार्यक्रम में भाग लेने वाले प्रतिभागियों को उस परफोर्मा को सही सही भर कर अपने साथ लाना है। 'इसके बावजूद भी कई प्रतिभागी उस परफोर्मा को ठीक तरह से भरकर नहीं लाए थे और न कार्यक्रम की अवधि में भर पाए, कारण कि प्रतिभागियों के पास उनके स्वैक्षिक संस्थाओं के संपूर्ण क्रियाकलापों की जानकारी उपलब्ध नही थी। इस सत्र के अन्त में सभी प्रतिभागियों को सूचित कर दिया गया कि इस उन्नमुखीकरण कार्यक्रम को पूरा करके प्रतिभागी अपने अपने संस्थाओं में जाकर उक्त परफोर्मा को सही सही भरकर डाक द्वारा अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा विभाग को जल्द से जल्द भेज दें। कुल मिलाकर इस सत्र में सभी प्रतिभागियों को स्वयं के अनुभवों एवं जानकारियों के आपसी आदान- प्रदान से बहुत लाभ हुआ। प्रतिवेदन तैयार करने तक संख्या ,33,34,35, 36, 37और 38 (प्रतिमागी संस्थाओं की सूची संख्या अनुसार) स्वैक्षिक संस्थाओं के वस्तुस्थिति परफोर्मा, अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा विभाग को प्राप्त नही हुआ था। प्रतिभागी संथाओं की वस्तुस्थिति की जानकारी परिशिष्ट -3 में दी गई है।

# प्राथमिक स्तर पर सीखने का न्यूनतम स्तरः-

श्री ईश्वर चन्द्र , प्रवक्ता (सलेक्शन ग्रेड) अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा विभाग राष्ट्रीय शैक्षिक अनुसंघान और प्रशिक्षण परिषद जो कि इस उन्नमुखीकरण कार्यक्रम में एक संसाधन व्यक्ति थे, सीखने के न्यूनतम स्तर की विवेचना की। उन्होंने बताया कि सीखने के न्यूनतम स्तर के निर्धारण की आवश्यकता का उद्गम, इस बुनियादी उददेश्यों से हुआ कि सभी बच्चों को चाहे वो किसी भी धर्म, जाति, स्थान के हो, लडका हो या लडकी एक समान स्तर की शिक्षा दी जानी चाहिए। न्यूनतम अधिगम स्तर सम्बधी कार्यों की पृष्ठ-भूमि मे नीति-निर्धारण का केन्द्रबिन्दु वर्तमान विषमताओं को दूर करना है। यह हमारा प्रयास है कि समाज के असुविधाग्रस्त तथा वंचित वर्ग के बच्चों (बीच में पढाई छोड देने वाले, कही न कही मजदूरी करने वाले बच्चे, लडिकयाँ, विशेषकर वे बच्चे जिनकों कम से कम निकट भविष्य में, संरचित शिक्षा के अन्तर्गत मात्र प्राथमिक शिक्षा का ही अवसर मिल सकेगा) की विकासात्मक आवश्यकताओं को ध्यान में रखते हुए गुणवक्ता को समता से जोड दिया जायें।

सामान्यतः न्यूनतम अधिगम स्तरों का उल्लेख उन अपेक्षित अधिगम-प्रतिफलों के रूप में किया जाता है, जो प्रक्षेणीय अंतिम व्यवहार के रूप में परिभाषित कियें जाते है। साथ ही न्यूनतम अधिगम स्तरों को उन अधिगम दक्षताओं के अर्थ में भी निरूपित किया जा सकता है जिन में, किसी विशेष कक्षा या शिक्षास्तर के अन्त में, प्रत्येक बच्चे द्वारा पूर्ण दक्षता की प्राप्ती अपेक्षित है। विषय-वस्तु निवेश का निर्वारण या अधिगम के विशिष्ट मापों की योजना बनाते समय, प्रत्येक दक्षता के आगे उप-दक्षता के रूप में निरूपण किया जा सकता है।

प्रत्येक शिक्षा स्तर की समाप्ती पर बच्चों को क्या सीख लेना चाहिए था, इसकी मुख्यतः तीन संदर्भों में व्याख्या की जा सकती है।

- 1. यह अपेक्षा की जाती है कि सुनिश्चित अधिगम स्तरों के निर्धारण से, प्रणाली में दिशाबोध तथा अधिक उत्तरदायित्व की भावना आयेगी।
- 2. यह आशा की जाती है कि विद्यालयों की उन्नति में न्यूनतम अधिगम स्तर एक साधन के रूप में काम करेगी। वास्तव में किसी विद्यालय या शिक्षा प्रणाली की गुवक्ता को वहाँ के छात्रों की कार्य योग्यता के आधार पर परिभाषित करना चाहिए।
- 3. अक्सर यह देखा गया है कि अधिकतर सरकारी एवं नगरपालिका पाठशालाओं में बच्चें पाँच वर्ष पढ़ने के बाद भी वे अपनी पाठय पुस्तकों को आसानी से पढ़ नहीं पाते। ये बात भी सत्य है कि उनमें से बहुत से बच्चों को प्राथमिक स्तर से आगे पढ़ने का मौका नहीं मिल पाता है। वो जो कुछ भी यहाँ सीखते है वहीं उन के व्यक्तित्व का निर्धारण करेगा। इसलिए यह अनिवार्य हो जाता है कि शिक्षा प्रणाली यह निश्चित करे कि बच्चों का ये मूल्यवान पाँच वर्ष व्यर्थ न जाए, साथ ही सभी बच्चे, चाहे वो किसी भी परिस्थिति से आये हो या किसी भी प्रकार के विद्यालयों में पढ़े हो, प्राथमिक शिक्षा समाप्त करने से पहले, अधिगम के एक न्यूनतम स्तर तक पहुच सके। फलस्वरूप वे स्थाई रूप से शिक्षित समाज के लिए उपयोगी व्यक्ति बन सकें।

सम्पूर्ण प्राथमिक स्तर के लिए तीन विषयों- भाषा, गणित एवं पर्यावरण अध्ययन के लिए न्यूनतम अधिगम स्तर निर्दिष्ट है, जो परिशिष्ट-2 में है।

व्यवहारिक रूप में न्यूनतम अधिगम स्तर तक पहुचने में कितना समय लगेगा, वो इस बात पर निर्भर करता है, कि बच्चे की सीखनें की गित क्या है। वहीं कुछ कारको ( जैसे:- उम्र, पिछला अधिगम अनुभव और विद्यालय में तथा उससे बाहर सीखने में लगाया गया समय) पर, बच्चों की सीखने की गित निर्भर करती है।

इसलिए यह माना जा सकता है कि अनौपचारिक शिक्षा प्रणाली या प्राथिमक शिक्षा के किसी भी अन्य वैकल्पिक प्रणाली के लिए, एक ही अधिगम स्तर निर्धारित किया जाए। वास्तव में, अधिगम स्तर निर्धारण के इस कार्य से, जिस का सम्बन्ध प्राथिमक विद्यालय के पाठयक्रम एवं विषय-वस्तु से नहीं बल्कि, कार्यात्मक प्रासंगिकता वाले कौशलों तथा दक्षताओं के रूप में अपेक्षित अधिगम प्रतिफलों के निर्धारण से है। ऐसे प्रश्नों का युक्तिसंगत उत्तर प्राप्त करने में सहायता मिलनी चाहिए, जिस का सम्बन्ध औपचारिक प्राथिमक विद्यालयों तथा वैकल्पिक प्रतिरूपों (मॉडलों)के अधिगम स्तरों की तुलना से है। इसलिए, अनौपचारिक शिक्षा प्राथिमक विद्यालय के प्रतिमानों (नॉर्म) के अनुरूप है या नही, यह प्रश्न ही समाप्त हो जाता है, किन्तु जो प्रश्न उठ खड़ा होता है, वह अधिगम के निर्धारित स्तरों को उपलब्ध करने के विभिन्न प्रतिरूपों और कार्य प्रणालियों की व्यवहार्याता का है। तदोपरान्त हमारा सम्पूर्ण ध्यान, अनौपचारिक शिक्षा प्रणाली के तर्कगत सम्बन्धी शकाओं से हटकर विभिन्न प्रतिरूपों की अवधि, गुणवक्ता तथा अध्यापन प्रक्रियाओं से सम्बन्धित प्रश्नों की ओर चले जाते है जिनका अर्थ है वे निवेश (इनपुट) जिनकी आवश्यकता यह सुनिश्चित करने के लिए होती है कि सभी शिक्षार्थी निर्धारित अधिगम स्तरों तक प्रभावी ढंग से पहुंच जाएं।

न्यूनतम अधिगम स्तर के निरूपण करने की तत्कालिक प्रक्रिया,पाठय-क्रम मात्र क्षेत्र के भाषा, गणित एवं पर्यावरण अध्ययन (सामाजिक अध्ययन एवं विज्ञान) तक ही सीमित है। हालांकि प्राथमिक शिक्षा के लिए ये अत्यन्त आवश्यक विषय है, फिर भी शारीरिक शिक्षा, कार्य अनुभव, संगीत तथा कला शिक्षा को सम्पूर्ण पाठय-क्रम से अलग नहीं किया जाना चाहिए। इसी प्रकार पाठय-क्रम के असंज्ञात्मक क्षेत्र जितनें आवश्यक है उतने ही संज्ञात्मक क्षेत्र भी।

#### : <sup>10</sup> : पठन-पाठन प्रविधि:-

1. भाषा:- प्राथमिक स्तर की पाठ्चर्या में भाषा का बडा महत्त्व है। भाषा के सीखने से जो मूलभूत कौशल अर्जित किए जाते हैं, वे अन्य क्षेत्रों की संकल्पनाओं को समझने, सीखने में भी सहायता करते हैं। इसके अतिरिक्त भाषा के प्रमुख नौ मूल कौशल जैसे- सुनना, बोलना, पढ़ना, लिखना, सुनकर एव पढ़कर विचारों को समझना, व्यावहारिक व्याकरण, स्व-अधिगम, भाषा प्रयोग तथा शब्द भंडार पर अधिकार(इसका विस्तृत विवरण परिशिष्ट 2 में है) छात्र के व्यक्तित्व निर्माण एवं उसके दैनिक जीवन की विभिन्न परिस्थितियों में प्रभावी संप्रेषण करने में भी महत्वपूर्ण भूमिका अदा करते है।

प्राथमिक स्तर पर भाषा-अधिगम के निम्नलिखित उदेश्य है:-

- 1. समझते हुए सुनना
- 2. औपचारिक एवं अनीपचारिक वार्तालाप में प्रभावी ढंग से बोलना।
- 3. समझते हुए पढना एवं विभिन्न प्रकार की शैक्षिक सामग्री को रस लेते हुए पढना।
- 4. तार्किक क्रम एवं मौलिकता के साथ साफ- साफ लिखना।
- 5. सुनकर एवं पढकर विचारों को समझना।
- 6. विभिन्न संदर्भों में व्याकरण का प्रकार्यात्मक प्रयोग करना।

भाषा-अधिगम को एक रूचिकर-प्रक्रिया बनाने के लिए विद्यालयों में समय-समय पर विभिन्न प्रकार के मनोरंजक कार्यकलापों का आयोजन किया जाना चाहिए, जैसे:- घटनाओं का वर्णन, सामूहिक विचार-विमर्श, कहानियाँ सुनाना, अभिनय, प्रश्नोत्तरी, पहेली प्रतियोगिता, चुटकुले, गीत, शब्दों के खेल, वाद-विवाद प्रतियोगिता आदि। मनोरंजक बाल पुस्तकों के पटन, चित्रमय कोष के अध्ययन तथा सभी सहपाठियों के बीच सामूहिक कार्यकलापों को बढावा देकर, छात्रों में स्वतः अधिगम के कौशल एवं भाषा के व्यावहारिक प्रयोग को भी विकसित किया जाना चाहिए।

श्री संजय कुमार (सहायक निदेशक, जन शिक्षा बिहार सरकार, पटना)ने इन उन्नमुखीकरण कार्यक्रम में हिंदी भाषा के पटन पाटन के निमित्त एक संसाधन व्यक्ति के रूप में कार्य करते हुए कहा कि बच्चों को भाषा बोलने के क्रम मे समाज एवं समुदाय की अहम भूमिका होती है। यदि किसी बच्चे को शुरू से ही जानवरों के बीच रखा जाये तो वो जानवर की भाषा बोलने लगेगा। उन्होंने बताया कि भाषा व्यक्ति द्वारा स्वच्छन्द स्वर को प्रस्तुत करने की एक प्रणाली है, जिसके आधार पर व्यक्ति क्रिया-प्रतिक्रिया करते है। भाषा मनुष्य एवं जानवरों में अन्तर स्पष्ट करती है।

उन्होने कहा कि जब हम बच्चों को कोई कहानी सुनाते हैं, यदि उस के साथ-साथ उस कहानी से सम्बन्धित चित्र भी दिखाए तो बच्चों में पढ़ने की सवेदना जागृत होती है। पढ़ने की आदत अच्छे शिक्षण के लिए प्रमुख प्रेरक होता है। श्री संजय कुमार ने आगे बतलाया कि आप बच्चों को एक कहानी सुनाए जब कहानी आधी रह गए तो बच्चों से कहे कि बाकी बची कहानी को किताब से पढ़कर पूरा करों।

उन्होंने भाषा पढाने की चार विधियों की व्याख्या की

- 1. अक्षर विधि (अक्षरों को एक एक करके पढाना)
- 2. देखो और बोलो विधि- इस विधि में बच्चों को चित्र दिखाया जाता है एवं बच्चे उसको समझकर बोलते है।
- 3. शब्द विधि-इस विधि में बच्चों को दो अक्षरो से बने हुए शब्दो को पढाते हुए धीरे धीरे तीन चार अक्षरों से बने शब्दों को पढाते है। इस प्रक्रिया से बच्चे अर्थपूर्ण शब्दों को आसानी से याद कर लेते है।
- 4. वाक्य विधि- इस विधि के अन्तर्गत बच्चों को अक्षर और शब्दो से पहले वाक्यों को पढाया जाता है।

श्री संजय कुमार ने लेखन-विधि पढाने के संदर्भ में बताते हुए कहा कि बच्चों को सर्वप्रथम कुछ चिडिया, जानवर, फल, फूल इत्यादि का चित्र दिखाएं और बच्चों से कहें कि अपनी स्लेट या कापी पर चित्र में दिखाए वस्तु का नाम लिखे। तदोपरान्त बताये कि उनकी लिखावट किस प्रकार अच्छी होगी। अच्छी लिखावट के लिए अक्षरों में स्पष्ट घुमाव, आकार में समानता, दो अक्षरों के बीच की जगह, दो शब्दो के बीच की जगह, दो रेखाओं के बीच की जगह, अक्षरों के बारे में सही उन्नमुखीकरण, शब्द, लाइन, व्यक्ति, लिखावट में स्थाइत्व के साथ लिखना सीखाना चाहिए। तदोपरान्त बच्चों को उनके पढे हुए अनुच्छेदों में से श्रुतलेख लिखने का अभ्यास कराना चाहिए। कथन की गति नियंत्रित करने के लिए टेपरिकार्डर का उपयोग भी किया जा सकता है। बच्चों में अच्छी लिखावट के साथ-साथ सही अक्षर-विन्यास का होना विषेश महत्व रखता है।

बच्चों में शब्द-भंडार बढाना माषा के पठन-पाठन का एक महत्वपूर्ण पहलू है। इस दिशा में निम्नलिखित क्रिया- कलाप, शब्द भंडार बढाने में निश्चित ही सहायक सिद्ध होंगे।

- 1. अक्षर-विन्यास खेल
- 2. अन्ताक्षरी या अन्ताक्षरी प्रतियोगिता
- दिए गये अक्षरो को इस प्रकार व्यवस्थित करके लिखना कि सार्थक शब्द बन जाए।
- दिए गए शब्दों के खाली स्थान को उपयुक्त अक्षरों से भरना।
- 2. गणित:- प्राथमिक स्तर पर गणित शिक्षण का एक प्रमुख उदेश्य बच्चों को अंकीय एवं स्थानिय समस्याओं को शुद्धता एवं शीघ्रता के साथ हल करने योग्य बनाना है जिस का सामना वे घर, विद्यालय एवं समुदाय में करते हैं। इस स्तर पर प्राथमिक गणित ऐसा होना चाहिए जो बच्चों में अपने भौतिक एवं तात्कालिक पर्यावरण से प्राप्त अनुभवों के आधारमूत गणितीय प्रत्ययों की समझ के विकास में सहायक हो सकें और स्थूल से सूक्ष्म एवं सामान्य से विशिष्ट की ओर लेजाकर बच्चों में समझ विकसित कर सकें।

प्राथमिक स्तर समाप्त करने पर बच्चा इस योग्य हो जायें कि:-

- 1. सही एवं शीघ्रता से गणना कर सकें
- 2. तर्कसगत रूप से अच्छा अनुमान व सही माप कर सकें
- 3. मौखिक कथनों को समुचित चिन्हों का प्रयोग करते हुए गणितीय शैली में रूपान्तरित कर सकें।
- 4. तालिका, रेखा चित्रो, घडियों व कलेन्डरों को देख कर समझ सकें।

- 5. गणितीय समस्याओं पर तार्किक रूप से सोच सकें।
- 6. दिये गये परिमाणों के आधार पर रेखा चित्र व आकृतियाँ बना सकें।
- 7. दैनिक जीवन की सरल समस्याओं को गणितीय प्रत्ययों के प्रयोग से सुलझा सके।
  प्राथमिक स्तर पर गणित पढाने के उददेश्यों के आघार पर गणितीय दक्षताओं को निम्नलिखित
  पाँच क्षेत्रों के अन्तर्गत वर्गीकृत किया गया है।
- 1. पूर्ण संख्याओं एवं संख्यांकों को समझना।
- 2. पूर्ण संख्याओं को जोडने, घटाने, गुणा व भाग करने की योग्यताओं के साथ-साथ गुणनखण्ड, लघुत्तम एवं महत्तम करने की योग्यता।
- 3. मुद्रा, लम्बाई, भार, धारिता, क्षेत्र एवं समय की, इकाइयों को उपयोग करने व इनसे सम्बन्धित दैनिक जीवन की साधारण समस्याओं को हल करने की योग्यता।
- 4. भिन्न, श्दशमलव एवं प्रतिशत का प्रयोग करने की योग्यता।
- ज्यामितीय आकारों एवं स्थानिक सम्बन्धों को समझना।
   उपरोक्त दक्षतायें विस्तृत रूप से परिशिष्ट 2 में उल्लेखित है।

श्री ईश्वर चन्द्र ने गणित विषय के संसाधन व्यक्ति के रूप में कार्य करते हुए प्राथमिक स्तर पर गणित के सम्पूर्ण विषय-वस्तु को तीन भागों में विभाजित किया:-

- क. संख्या पद्वति:- पूर्ण संख्या, चार आधारभूत क्रियाये (जोड, घटाना गुणा एवं भाग)गुणनखण्ड, गुणक, मौलिक संख्या, लघुत्तम, महत्तम, भिन्न, दशमलव, प्रतिशत, औसत।
- ख. माप:- धन, लम्बाई, भार, क्षमता, समय, क्षेत्र।
- ग. अवकाशिक प्रत्ययः- बिन्दु, आयताकार, रेखा खण्ड (भाग) वर्गाकार, वृत्त, त्रिभुज।

श्री ईश्वर चन्द्र ने गणित पठन-पाठन प्रविधी के लिए निम्नलिखित सुझाव दियें।

क. किसी विशेष दक्षता को पढाने के लिए प्रयुक्त सामग्री को प्रस्तुत करने से पहले इस बात का ध्यान रखना आवश्यक है कि प्रस्तुत दक्षता के पूर्व की दक्षताओं की जानकारी बच्चों में हो। पूर्व दक्षताओं की जानकारी हेतु परिक्षाओं का प्रयोग किया जा सकता है। उदाहरण के लिए बच्चों को जोडना सिखने के पहले उन्हें गिनतियों एवं संख्याओं के स्थानीय मानो का ज्ञान हो।

निम्नलिखित प्रकार के लिखित/मौखिक प्रश्नों को बच्चों से पूछा जा सकता है।

- 1. कौन सी संख्या 16 के बाद आती है।
- 2. कौन सी संख्या 23 के पहले आती है
- 3. 59 और 73 में से कौन सी बड़ी संख्या है
- 4. 87 से 95 तक की सभी संख्याओं को लिखे
- 5. 97 और 105 के बीच में कितनी पूर्ण संख्याएं आती है
- निम्न लिखित संख्याओं को आरोही क्रम में व्यवस्थित करें
   60,74,28,37,92,9,49,29,68
- 7. 2806 में 8 और 0 का स्थानीय मान क्या है।
- 8. 50512 मे दोनों 5 के स्थानीय मान में क्या अन्तर है।

ख. बच्चों को किसी दक्षता को सिखाना, बहुत हद तक इस बात पर निर्मर करता है कि शिक्षक/अनुदेशक, बच्चों के समक्ष उस दक्षता की प्रस्तुती किस प्रकार करते हैं। यदि इस दक्षता की प्रस्तुती जिवन्त (बच्चों के व्यवहारिक जीवन, परिस्थितियों तथा दूसरी दक्षताओं से जुडा) होगा तो बच्चों को इस की आवश्यकता महसूत होगी तथा उसे सिखने के लिए प्रेरित होगें। यदि ऐसा नही हुआ तो बच्चे बोर हो जायेगें तथा उस दक्षता को सीखने के प्रति अभिक्षिच खत्म हो जायेगी। उदाहरण के लिए गिनने की दक्षता सिखाने के लिए निम्नलिखित तरीके से परिस्थिति निर्माण किया जा सकता है।

कल्पना कीजिए कि हमने बिस्कुट का एक पैकेट खरीदा जिस में 10 बिस्कुट थे। उस बिस्कुट के पैकेट को एक कक्षा में ले गये जहाँ 25 बच्चे पढते हैं। यदि मैं प्रत्येक बच्चे को एक एक बिस्कुट देना चाहूं तो हमें और कितने बिस्कुट खरीदने पडेगें जिससे कि सभी बच्चों को एक एक बिस्कुट मिल जाये।

- ग. सम्पूर्ण न्यूनतम अधिगम स्तर की प्राप्ति को ध्यान में रखते हुए किसी खास दक्षता से जुडे पाठय-क्रम एवं पाठय-क्रम के विषयों का पूर्ण विश्लेषण करना चाहिए। पठन-पाठन सामग्रियों में दिए गए प्रत्येक विषय-वस्तु, चित्र/तालिका/नक्शा/रेखा चित्र इत्यादि के कार्य के सम्बन्ध में आपको जानकारी होनी चाहिए। आप की सारी व्याख्यायें, उपलब्ध स्थानीय वस्तुओं की सहायता से होनी चाहिए। उदाहरण के लिए बच्चो को जोडने के विषय को समझाने के लिए उन्हें ये समझाए कि जोडने का अर्थ ''समतुल्य वस्तुओं को मिलाकर इन की कुल संख्या को गिनना है" मान लीजिए हमें 3 तथा 5 को जोडना बताना है तो हम कोई भी 3 वस्तु (स्थानीय वस्तु)जैसे 3 पेन्सिल और 5 पेन्सिलों को लेकर मिला देगे, फिर कुल पेन्सिलों की संख्या को गिनेगें क्योंकि हमारे पास 8 पेन्सिल है। अब आप बच्चों को बता सकते है कि 3+5=8 होगा।
- घ. प्रत्येक दक्षता के लिए बच्चों द्वारा दक्षता को सीखने के क्रम में की गई गल्तीयों की एक सूची बनानी चाहिए। उदाहरण के लिए जोडने के क्रम में बहुत से बच्चें ''हासिल'' को जोडने में गलती कर जाते है या जोडना मूल जाते है।
- ख.- प्रायः शिक्षा प्रक्रिया को इस प्रकार बनाना चाहिए कि बच्चों द्वारा गलितयाँ न हो। इस उदेश्य की प्राप्ति के लिए समतुल्य विषय-वस्तु दक्षताओं को सिखाने पर विशेष ध्यान देना चाहिए। सम्भावित गल्तीयों को दूर करने के लिए विभिन्न शिक्षण सहायक सामग्रियों जैसे - नक्शे, कहानियाँ, खेल तकनीक, तालिका, रेखा चित्र, चित्र आदि का प्रयोग करना चाहिए।

उदाहरण के लिए जोड़ने में हासिल की गल्ती को दूर करने के लिए निम्नलिखित तरीके का उपयोग करना चाहिए। मान ले हमें दो संख्या 28 और 39 को जोड़ना बताना है-

$$28 + 39 = ?$$

28 -> 2दहाई 8 ईकाई -> 0 0 x x x x

X X X X

39 -->3 दहाई 9 ईकाई --> 0 0 0 x x x x

x x x x x

(प्रत्येक 0 दहाई है तथा प्रत्येक x ईकाई है)

अब इन र	तभी को मिला दें,	और कुल दहाई और इकाईयों को गिनें।	
0 0	XXXX	$000 \times \times \times$	हासिल $\{j\}$
000	$\{\mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x}\}$	$\rightarrow 000 xxxx$	28
	$\mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x}$		
	XXXXX		39
****			
5दहाई	17 ईकाई		67

(इस बात पर जोर दिया जाए कि एक दहाई, दस इकाईयों को मिलाने से बनंती है)
टिप्पणी:- इस बात को बच्चों को समझायें कि जब कभी भी 10 या उस से अधिक इकाई हो तो 10 वस्तुओं का
एक समूह बनेगा, जो कि दहाई के समूहों के साथ मिला दिया जाता है।

#### अर्थात- 28+39=67

च. विभिन्न दक्षताओं के पठन-पाठन के लिए मनोरंजक सामग्रियों का प्रयोग करना चाहिए। उदाहरण के लिए जोडना सिखाने के लिए, दिए गए जादुई वर्ग में खडा वर्ग में अंकित अकों का योग तथा पडा वर्ग में अंकित अंकों का योग बच्चों से पूछ सकते है।

Ī	36	15	30	1	626	633	610	617	624	खडा वर्ग
	21	27	33		632	614	616	623	625	
	24	39	18		613	615	622	629	631	
+					619	621	628	630	612	पडा वर्ग
-	कर्णवर	f			620	627	634	611	618	

बच्चों को यह जानकार बहुत अच्छा लगेगा कि जादूई वर्ग की प्रत्येक खडा वर्ग, प्रत्येक पडा वर्ग एवं प्रत्येक कर्ण वर्ग का योग समान आता है। इसके अतिरिक्त बच्चों को 3x3 का जादुई वर्ग बनाना सिखाया जा सकता है।

- **छ**. बच्चों को गणित पढाने का एक मुख्य उदेश्य यह है कि बच्चों में सोचने एवं तर्क शक्ति का विकास हो। कक्षा की परिस्थितियों में निम्न क्रियाकलामों को शामिल करने से बच्चों की सोचने एवं तर्कशक्ति का विकास हो सकता है। उदाहरण के लिए चार आधारभूत क्रियाओं को पढाने के लिए बच्चों से निम्न प्रकार के प्रश्न पूछना चाहिए साथ ही उस के उत्तर के लिए उन्हें पर्याप्त समय देना चाहिए।
  - 1. ऐसी दो संख्याओं को निर्धारित करे जिस का योग 6 है?
  - 2. ऐसी दो संख्याओं को निर्धारित करें जिस का अन्तर 5 है, ऐसी संख्याओं के कितने जोडे सम्भव है?
  - 3. ऐसी दो संख्याओं को निर्धारित करे जिसका गुणनफल 12 हो, ऐसी संख्याओं के कितने जोडे सम्भव है?
  - 4. ऐसी दो संख्याओं को निर्धारित करें जिन का जोड और गुणनफल समान है?
- ज. जैसा कि अनौपचारिक शिक्षा केन्द्र में पढ़नें वाले बच्चों को गृह कार्य (पढ़ाई से सम्बन्धित) करने का बहुत कम समय मिल पाता है, इसलिए बच्चों को दिए जाने वाले पढ़न क्रिया-कलापों को अनौपचारिक शिक्षा केन्द्र पर ही पूरी कराई जानी चाहिए। इन क्रिया-कलापों में बच्चों की तात्कालिक वातावरण एवं बच्चों की दैनिक जीवन की व्यवहारिक क्रियाओं का प्रयोग करना सिखाया जाना चाहिए। व्यक्तिगत एवं सामूहिक क्रियाकलापों को करवाया जाना चाहिए एवं इसे करने के लिए प्रोत्साहित करना चाहिए।प्रशिक्षण कार्यक्रम में विकसित की गयी सिखने सम्बन्धी क्रियाओं का उपयोग बच्चों को पढ़ाने में की जानी चाहिए।
- झ. तीव्र बुद्धि वाले बच्चों के लिए प्रत्येक प्रमुख दक्षता शिक्षण के लिए उच्च कोटि की पठन-पाठन सामग्री का निर्माण करना चाहिए। उदाहरण के लिए गुणा की क्रिया के लिए भाग विधि से दो अंकों का महत्तम निकालने हेतु मौलिक तर्क 'क्यों' क्षमता का विकास किया जा सकता है। कई बार भविष्य में पढ़ाई जाने वाली सामग्री वर्तमान के लिए उच्चकोटि की पठन-पाठन सामग्री के रूप में प्रयुक्त की जा सकती है।
- ट. किन बच्चों को कौन सी दक्षताओं को समझने एवं करने में परेशानी होती है, इस बात पर शिक्षक/अनुदेशक को विशेष ध्यान देना चाहिए। मन्द गित से सीखने वाले बच्चों के लिए अलग से पठन-पाठन सामग्री तैयार करना चाहिए, ऐसे बच्चों को अधिक अभ्यास करना चाहिए एवं अनुदेशकों के द्वारा अधिक समय देना चाहिए। इन बच्चों को दूसरे बच्चों के स्तर तक लाने के लिए इनकी सहायता भी करनी चाहिए।
- ठ. प्रत्येक ईकाई परिक्षण (संबन्धित दक्षताओं का संग्रह)में लिखित एवं मौखिक परिक्षणों के द्वार बच्चों की उपलब्धि ज्ञात की जानी चाहिए।

इकाई परिक्षण के लिए पहले नीचे दी गई सारणी जैसा खाका बना लेना चाहिए।

: 16 :

	स्तर						
दक्षता	ज्ञान	समझ	प्रयोग	कौशल	ु कुल योग		
1							
2							
3							
10							
कुल योग				·			

टिप्पणी:-सारणी के प्रत्येक वर्ग में प्राप्तांक भरा जाएगा।

इस उत्रमुखीकरण कार्यक्रम में सीखा गया कि विभिन्न दक्षताओं एवं विभिन्न स्तरों के लिए किस प्रकार अच्छे परिक्षण-पदों को बनाया जा सकता है। उपरोक्त सारणी के प्रत्येक वर्गों के लिए परीक्षण पदो को बनाया जाना चाहिए। इस प्रतिवेदन के अतं में ''अच्छे प्रश्नों की विशेषताएं'' तथा विभिन्न प्रकार के प्रश्न परिषिष्ट 5 एवं 6 में दिया गया है। यह प्रतिवेदन अच्छे परीक्षण-पद बनाने की क्षमता विकासित करने में सहायक सिद्ध होगी। इकाई परीक्षण जैसा कि परिशिष्ट 5 एवं 6 में दिया गया है, बच्चों की उपलब्धि परीक्षण में सहायक सिद्ध होगा। इस प्रकार यह बच्चों के कमजोर पक्षो को निर्धारित करने में सहायक होगें, जिससे कि आप को सुधार कार्यक्रमों को क्रियान्वित करने में सहायता मिलेगी।

#### 3.पर्यावरण अध्ययन:-

सामान्यतः ये माना जाता है कि पयावरण के दो प्रमुख पहलू है (1)प्राकृतिक (2) मानवीय (सामाजिक) ये बात पर्यावरण अध्ययन के पाठयक्रम में परम्परागत ढंग से अलग अलग भाग एक एवं माग दो या समाजिक अध्ययन एवं विज्ञान के रूप में उल्लेखित मिलता है। वस्तुत सम्पूर्ण परिवेश को मनुष्य तथा प्राकृतिक व समाजिक परिवेश की आपसी क्रिया-प्रतिक्रिया का एकीकृत परिणाम माना जाना चाहिए।

प्रस्तावित पाठयक्रम की रूप-रेखा में इन तीनो परिवर्तनशील एवं अन्क्रियात्मक अंगों को सम्मलित किया गया है। दस प्रमुख दक्षताओं में पहली दक्षता का सम्बन्ध प्राकृतिक एवं समाजिक परिवेश के सन्दर्भ में व्यक्ति की भलाई से है। उस के बाद की पाँच दक्षतायें समाज के विभिन्न पहलुओं से सम्बन्धित है, जैसे- समाजिक परिवेश, श्रम की दुनियाँ, मनुष्य एवं प्राकृतिक परिवेश का आपसी सम्बन्ध, मनुष्य के भूत एवं वर्तमान का सम्बन्ध तथा परिवेशीय अन्तक्रिया से सम्बन्धित कुछ सामान्य समस्याएं। अन्तिम चार दक्षताओं का सम्बन्ध प्राकृतिक परिवेश के उन प्रमुख तत्वों से है जो व्यक्तिगत एवं समाजिक पक्षों के अतिरिक्त वैज्ञानिक पक्ष को भी प्रभावित करते है। साथ ही इस के अन्तर्गत स्वास्थ्य सजीव एवं निर्जीव वस्तुओं तथा आकाश एवं पृथ्वी का समावेश भी है।

निम्नलिखित दस प्रमुख दक्षताओं का सम्बन्ध विकास के ज्ञानात्मक भावनात्मक एवं मनोगन्यात्मक पक्षों से है:

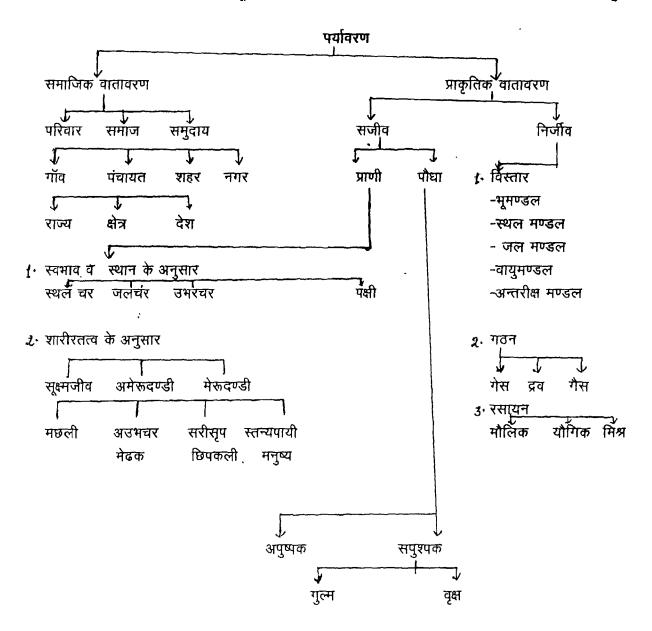
- 1. बच्चे समाजिक एवं प्राकृतिक परिवेश के संदर्भ में अपनी भलाई के बारे में जागरूकता अर्जित करते है।
- 2. बच्चे अपने समाजिक-नागरिक परिवेश के महत्वपूर्ण पहलुओं की छानबीन करते है एवं उनकी कार्यविधियों को समझते है।
- 3. बच्चे कार्य में लगे विभिन्न लोगों के बारे में जानते है तथा कार्य जगत के महत्व को सराहना करते है।
- 4. बच्चे, मनुष्य एवं उनके परिवेश के बीच स्थानिक एवं परस्पर प्रभाव डालने वाले सम्बन्धों को समझते है तथा उनकी व्याख्या करते है।
- 5. बच्चे मानव के अतीत एवं वर्तमानं में देखते है, तथा अतीत को सही परिपेरक्ष्य में समझते है।
- 6. बच्चे सामान्य लेकिन सरल और आसानी से दिखाई देने वाली समाजिक आर्थिक परिस्थितियों और समस्याओं को समझते है तथा उनका विश्लेषण करते है। साथ ही अपने अनुभवों के स्तर पर उनका सम्मावित हल भी खोजते है।
- 7. बच्चे उन कारको को समझते है जो अच्छे स्वास्थ्य को बनाये रखने में सहायक होते है।
- 8. बच्चे अपने परिवेश की सजीव वस्तुओं के विषय में जानकारी प्राप्त करते हुए उसका वर्गीकरण करते है तथा उस का निष्कर्ष निकालते है।
- 9. बच्चे निर्जीव वस्तुओं की कुछ सामान्य विशेषताओं का प्रेक्षण एवं जॉच करतते है।
- 10. बच्चे पृथ्वी तथा आकाश में होने वाली सरल घटनाओं का अवलोकन करते है तथा निष्कर्ष निकालते है।

उपरोक्त सदक्षताओं को क्रमानुसार विकसित करने के उदेश्य से छोटी उप-दक्षताओं में उपयुक्त विषयवस्तु के साथ विभाजन किया गया है तथा फलोचार्ट के रूप में एक दूसरे से जोडकर क्रमानुसार प्रस्तुत किया गया है। इस प्रतिवेदन के परिशिष्ट-3 में फलोचार्ट दिया गया है।

श्री चन्दन सेन, अध्यक्ष ''लोकसेवायतन'' नीमडीह, जिला-पश्चिमी सिंहमूम बिहार एवं श्री निकुंज प्रसाद नारायण, उप-सचिव सह प्रामर्शी अनौपचारिक शिक्षा, राज्य संसाधन केन्द्र पटना,बिहार ने संसाधन व्यक्ति के रूप में अपने कार्यों का सम्पादन करते हुए क्रमशः पर्यावरण अध्ययन के विज्ञान एवं समाजिक अध्ययन खण्डों के बारे में विस्तृत जानकारी दी ।

श्री चन्दन सेन ने पर्यावरण अध्ययन पर प्रकाश डालते हुए पर्यावरण को मुख्य दो खण्डों समाजिक वातावरण एवं प्राकृतिक वातावरण में विभाजित किया, तथा इस और स्पष्ट करने के लिए श्यामपट पर निम्नलिखित खाका बनाया।

## पर्यावरण अध्ययन विषय में न्यूनतम अधिगम स्तर के आधार पर प्राथमिक स्तर के लिए विषय-वस्तु



सभी पाठयक्रमों को कुल चार सत्र के अन्तर्गत उपदक्षताओं में बाटें गए।

इसके उपरान्त श्री चन्दन सेन ने मुख्य रूप से विज्ञानप खण्ड को स्पष्ट करते हुए निम्न बातें कहीं।

- 1. बच्चों में विज्ञान सम्बन्धी दक्षताओं एवं उपदक्षताओं की सम्प्राप्ति में सहायता करना।
- अन्धिविश्वास, कूसंस्कार, गलतफहमी आदि अनचाहे तत्वों की बच्चों के मन से दूर करना एवं बच्चों में वैज्ञानिक सोच पैदा करना तािक वे हर प्राकृतिक घटनाओं का एक वैज्ञानिक हल ढूंढ सकें।

- 3. समाज में होने वाले कृषिकार्य, कुटीर उद्योग, बडे औद्योगिक इकाई एवं उपक्रमों के पीछे निहित वैज्ञानिक सिद्धान्तों को समझने में सहायता करना।
- 4. दैनिक जीवन में वैज्ञानिक सिद्धान्तों का महत्व एवं उपयोगिता के बारे में समझ पैदा करना!
- 5. परिवार के आर्थिक, समाजिक विकास में विज्ञान के महत्व को समझना।
- 6. सामान्य वैज्ञानिक सिद्धान्तों के उपयोग से चलने वाले जीवनोपयोगी साधनों की कार्यविधि को समझने की दक्षता का विकास करना।

### शैक्षिक प्रक्रियाः-

अनौपचारिक शिक्षा केन्द्र के लिए बनी पुस्तकों में भाषा, गणित एवं पर्यावरण की दक्षताओं को स्वीकृत करके पाठ बनाई जाती है। ताकि कम समय में दक्षता सम्प्राप्ति स्तर हासिल करवाई जा सकें ऐसी परिस्थिति में हमें उस विशेष पाठ का विश्लेषण करके देख लेना होगा कि विज्ञान सम्बन्धी दक्षताएं किन किन पाठों में संकलित हैं।

#### विज्ञान पाठ में आने वाले स्तर:-

- 1. अवलोकन क्रिया:- किसी भी घटना, तत्व, पदार्थ या क्रिया-सास्क्रिया को पाँचों इन्द्रिय द्वारा अनुभव करने के उपरान्त उस का क्रिमिक विधि से अवलोकन ।
- 2. विश्लेषण:- अवलोकन की हुई घटना, तत्व, पदार्थ, या क्रिया सांस्क्रिया को प्रश्नोत्तर प्रक्रिया से (कब,कहा, क्यों कैसे द्वारा)विश्लेषण करना।
- 3. वर्गीकरण:- घटयना, तत्व, पदार्थ या क्रिया सांस्क्रिया को अपनी जानकारी के अनुसार वर्गीकृत करना।
- वैज्ञानिक सिद्धान्त की तलाश:- वर्गीकृत घटना, तत्व, पदार्थ या क्रिया-सांस्क्रिया के पीछे निहित वैज्ञानिक सिद्धान्तों एवं वैज्ञानिक कारणों को खोजना।
- 5. वैज्ञानिक सिद्धान्तों की कार्यविधि को समझना एवं दैनिक जीवन में उसकी प्रासंगिकता ढूढना:-अगर कोई घटना, क्रिया - सांस्क्रिया वैज्ञानिक सिद्धान्तों के आधार पर घटती है तो उसके पीछे निहित कार्यविधि को समझना एवं दैनिक जीवन में उसकी उपयोगिता के बारे में जानकारी प्राप्त करना उदेश्य -है।

विज्ञान सम्बन्धी हर पाठ के लिए कुछ खेल क्रियाएं एवं क्रियाशीलन खोजना चाहिए जो कि शैक्षिक परिवेश के अनुकूल हो तथा आसानी से की जा सके।

#### उदाहरण के लिए:-

दक्षता/उपदक्षता

1. शरीर के विभिन्न अंगो के बारे में जानकारी

2. पशु-पक्षी के बारे में जानकारी

खेल क्रिया/प्रचलित खेल

"घोघो रानी" खेल"- राज्य संसाधन केन्द्र पटना द्वारा तैयार की गई "खेले -सीखें" किताब ;

उड-पंछी खेल- राज्य संसाधन केन्द्र पटना द्वारा तैयार की गई किताब ''खेले-सीखें''। विज्ञान की पढाई सदैव अवलोकन से प्रारम्भ होती है एवं वैज्ञानिक सिद्धान्तों के बारे में जानकारी प्राप्त करने के उपरान्त ही दक्षता सम्प्राप्ति पर जाकर खत्म होती है विज्ञान पढाने की अनौपचारिक विधि यही हो सकती है कि सदैव परिवेश में उपलब्ध तत्वों के अवलोकण से प्रारम्भ करके उनकी क्रियाशीलन में छुपे वैज्ञानिक सिद्धान्तों पर जाकर खत्म करे। जब भी कोई बालक पर्यावरण में किसी घटना का अवलोकण करता है तो उसके मन में कुछ प्रश्न उमर कर आते हैं जब उसे अपने प्रश्नों का सही उत्तर नही मिल पाता तो उसकी वैज्ञानिक सोच दब जाती है एवं वह धीरे घीरे कुछ गलत धारणाओं एवं सिद्धान्तों का शिकार हो जाता है।

#### शैक्षिक कौशल :-

- 1. ज्यादातर स्थानों पर चलने वाले अनौपचारिक शिक्षा केन्द्र गाँव एवं ग्रामीण परिवेश से सम्बन्ध रखने वाले होते है। जाहिर है हमें अपने शैक्षिक कौशल में भी ग्रामीण वातावरण को ही प्राथमिकता देकर पठन-पाठन कार्य करने पडेंगे।
- 2. सदैव बच्चों से कुछ प्रश्न पूछकर अथवा ऐसी बातें करके पढाई प्रारम्भ करनी चाहिए जिससे बच्चे के मन में जिज्ञासा पैदा हो एवं वह जानकारी प्राप्त करने के लिए प्रोत्साहित हो।
- 3. बच्चों के मन में आने वाले जिज्ञासा के साथ दक्षता सम्प्राप्ति कराने योग्य स्तर की सामंजस्यता रखते हुए शैक्षिक क्रियाओं को आगे बढानी चाहिए, ताकि निर्धारित समय के अन्दर उदेश्यों की प्राप्ति हो सके।
- 4. किसी भी प्रश्न का उत्तर बच्चों को "ना" में नहीं होनी चाहिए। "ना " वाचक उत्तर सुजनशीलता का विरोधाभाष है।
- 5. मशीन, संयन्त्र व तकनीकों की जानकारी दिलाते समय सबसे आसान मशीन, संयन्त्र व तकनीको की जानकारी से पढाई प्रारंभ करनी चाहिए।
- 6. तुलनात्मक विश्लेषण का सहारा लेने से शैक्षिक क्रिया सरल बन जाती है एवं बच्चों में किसी भी तत्व के लिए आसानी से समझ पैदा की जा सकती है।

सर्वोपरि वैज्ञानिक दक्षता सम्प्राप्ति स्तर का सही आकलन प्राप्त करने के लिए शिक्षक/अनुदेशक कियाशीलन, प्रश्नोत्तर, लेख, वर्णनात्मक क्रिया एवं अन्य सहायक तत्वों का सहारा ले सकते हैं। ऐसा भी हो सकता है कि दक्षता सम्प्राप्ति का स्तर अपनी बराबरी की मात्रा से न चले एवं एक दूसरे के परिपूरक साबित होने वाली दक्षताओं में किसी की प्राप्ति अपूर्ण न रह जाय। सत्र के अन्त में होने वाले मूल्यांकनण में उन सभी बातों का पता लगाकर बच्चों का वर्गीकरण कर लेने के बाद ही अगले सत्र की पढ़ाई प्रारम्भ की जा सकती है।

## विज्ञान अध्ययन का मूल्यांकन

न्यूनतम अधिगम स्तर के अनुसारं विज्ञान पाठ की दक्षताओं का चयन

पाठयपुस्तक से उपदक्षताओं को सम्पोषित साधारण मानसिक दक्षताओं को करने वाले इकाईयों का चयन

पाठ आधारित प्रश्नोत्तर, क्रियाशीलन, पाठयपुस्तक से बाहर की घटना वार्तालाप-इत्यादि प्रश्नोत्तर, क्रियाशीलन

दक्षता सम्प्राप्ति स्तर का ऑकलन

सफलता की प्रतिशत मात्रा

श्री निकुंज प्रकाश नारायण (राज्य संसाधन केन्द्र पटना) ने सामाजिक अध्ययन के शिक्षण प्रविधियों के संदर्भगत सामाजिक विषय में प्रयोग किये जाने वाले निम्न शब्दाविलयों का अर्थयुक्त व्याख्या किया।

राजा:- छोटे क्षेत्रों के निवासियों पर शासन एवं उनकी सुरक्षा करने वाला।

शासक:- राजाओं का राजा. जो युद्ध में पड़ोसी राजा को पराजित करके उसके शासन को अपने अधिकार में लेकर उस पर शासच करता है। इसके एवज में पराजित राजा को कुछ मुद्रायें एवं सुविधायें उपलब्ध कराता है।

व्यापार:- दो राज्यों, दो देशों के बीच उत्पादनों के आदान-प्रदान की प्रक्रिया। इस प्रक्रिया में एक देश, राज्य व्यक्ति दूसरे देश, राज्य व्यक्ति से उसके उत्पादन को मंगाता है तथा उसे अपने उत्पादनों को देता है। स्थानिय व्यापार:- इस के अन्तर्गत छोटे-छोटे क्षेत्रों के बीच अपने-अपने क्षेत्रों के उत्पादनों का मुद्रा आधारित आदान-प्रदान होता है।

घरेलू व्यापार:- अपने देश के अन्दर मुद्रा पर आधारित वस्तुओं का आदान-प्रदान होता है। अन्तरराष्ट्रीय व्यापार:- इस के अन्तर्गत विश्व के विभिन्न देशों के बीच सर्वमान्य मुद्रा एवं उत्पादों पर आधारित वस्तुओं का आदान-प्रदान

आयात-निर्यात:- अन्तरराष्ट्रीय व्यापार के दो पहलू है। बाहर के देशों से किसी वस्तु को मंगाने की प्रक्रिया को आयाता एवं अपने देश के उत्पादनों को मेजने की प्रक्रिया को निर्यात कहा जाता है। व्यापार संतुलन:- दो देशों के आयात एवं निर्यात के सम्बन्ध स्थापित करने की प्रक्रिया को व्यापार संतुलन कहते तस्करी:- यह व्यापार का एक अवैध तरीका है। जिस में सरकार को कर का भुगतान कियें बिना छुपे रूप से वस्तुओं को एक जगह से दूसरे जगह ले जाया जाता है। जिस के परिणाम स्वरूप सरकार को कर का बहुत नुकसान होता है।

दहेज:- यह एक अवैध रूढीवादी परम्परा है जिस में लडकी/लडकों (बहुत से संस्कृतियो में विवाह के समय लडकों के माता/पिता लडकी के माता पिता को दहेज देते है।) के माता/पिता से दूसरे पक्ष के माता/पिता दहेज लेते है।

काला-बाजार:- यह कुछ निश्चित व्यापारियों द्वारा किसी वस्तु का कृतिम अभाव या कमी पैदा कर उस वस्तु को मूल्य बढाकर बेचते है।

जाति-पातः जाति-पात मानने वाला व्यक्ति अपनी जाति के प्रति अधिक सानिध्य रखता है तथा दूसरे जातियों के प्रति घृणा का भाव रखता है।

मौलिक अधिकार:- यें वे अधिकार है जो न्यायपालिका के द्वारा संरक्षित किये जाते है।

खेती-बारी:- यह एक ऐसी प्रक्रिया है जो फसलों के उत्पादन हेतु किये जाते है। भारत एक कृषिप्रधान देश है। क्योंकि यहाँ 80% से ज्यादा लोग कृषि पर निर्भर है।

आगे उन्होंने कहा कि शिक्षको/अनुदेशको में निम्न लिखित कौशल होना बहुत जरूरी है। तभी हम अनौपचारिक शिक्षा को प्रभावी रूप से आगे बढा सकतें है।

- क. विषय-वस्तु का ज्ञाता।
- ख. सरल एवं स्पष्ट वर्तालाप कौशल
- ग. कर्तव्य निष्ठा
- घ. अनौपचारिक शिक्षा केन्द्र के बच्चो, परियोजना अधिकारियों निरीक्षको आदि के साथ सौहार्दपूर्ण सम्बन्ध स्थापित करने का कौशल ।

## पाठय सम्बन्धित अनुदेशात्मक सामग्रियों का विश्लेषण:-

प्रतिभागियों को पूर्व में ही सूचित कर दिया गया था कि, वो अपने अनौपचारिक शिक्षा केन्द्र में उपयोग करने वाले पठन-पाठन सामग्रियों को अपने साथ लाए। इस उन्नमुखीकरण कार्यक्रम में शामिल, लगभग सभी स्वैच्छिक संस्थाए, राज्य संसाधन केन्द्र बिहार, पटना द्वारा निर्मित पठन-पाठन सामग्रियों का उपयोग अपने अनौपचारिक शिक्षा केन्द्रों में करती है। मात्र एक स्वैच्छिक संस्था ''लोक सेवायतन'', राज्य संसाधन केन्द्र बिहार द्वारा निर्मित पठन-पाठन सामग्रियों के साथ-साथ स्वयं की निर्मित पठन-पाठन सामग्रियों का भी अपने अनौपचारिक शिक्षा केन्द्रों में उपयोग करती है।

इस सत्र के अंतर्गत श्री ईश्वर चन्द्र जी ने विभिन्न विषयों के पठन-पाठन सामग्रियों के विश्लेषण करने के सम्बन्ध में बतलाया। इस व्याख्या के अंतर्गत उन्होंने गणित विषय के पठन-पाठन सामग्रियों का विश्लेषण करके उदाहरण दिया। तदोपरांत किस प्रकार अलग-अलग विषयों - भाषा, गणित एवं पर्यावरण अध्ययन के पठन-पाठन सामग्रियों का विश्लेषण होता है, इस पर विचार विमर्श हुआ। श्री ईश्वर चन्द्र जी ने विश्लेषण के मुख्य उदेश्यों को स्पष्ट करते हुए इसके विभिन्न अवधारणाओं, सिद्धान्तों, प्रक्रियाओं एवं दृष्टान्तों को शामिल करने का क्या उदेश्य है, व किस प्रकार पठन प्रवधी में सहायक होगा, क्यों किसी खास प्रक्रिया का अनुसरण किया जाता है, इस तरह के विभिन्न प्रश्नों को पाठ सम्बधित अनुदेशात्मक सामग्रियों का विश्लेषण करने के क्रम में स्पष्ट किया।

सभी प्रतिभागियों को तीन समूहों मे विभाजित किया गया। प्रतिभागियों के रूचि अनुसार भाषा, गणित एवं पर्यावरण अध्ययन विषयों का समूह बनाया गया। पहला समूह भाषा दूसरा समूह गणित एवं तीसरा समूह पर्यावरण अध्ययन सम्बन्धी पठन-पाठन सामग्री का विश्लेषण किया

तीनों समूहों में विश्लेषण चार्ट में सर्वप्रथम परिचय-प्रदत्त लिखा गया

- 1. पुस्तक/अनुदेशात्मक सामग्री का नाम (शीर्षक)
- 2. लेखक (यदि कोई हो)
- 3. प्रकाशक
- 4. संपादक
- 5. कक्षा/सत्र संख्या

प्रत्येक पाठय-क्रम में चाहे तो निम्न बातों का उल्लेख कर सकते हैं।

- 1. अन्तरनिहित विषय-वस्त्
- 2. अन्तरनिहित दक्षताएं

विश्लेषण में अगला कार्य, पाठ/अनुदेशात्मक सामग्रियों के मजबूत एवं कमजोर पक्षों से सम्बन्धित प्रदत्त संग्रह तथा प्रमाणों का लेखन करना होता है। तीनों समूहों ने विश्लेषण कार्य हेतु एक से ज्यादा पाठ/अनुदेशात्मक सामग्रियों के साथ अनौपचारिक शिक्षा केन्द्रो पर गए जहाँ पाठ/अनुदेशात्मक सामग्रियों के बनाने हेतु विभिन्न संघटको पर प्रमाण-लेखन कार्य किए।

## 1.विषय-वस्तु का चयनः-

- 1. क्या अलग-अलग पाठों के विषय-वस्तुगत भार, पढने वाले बच्चों के स्तर का है? प्रमाणित करें।
- 2. क्या विषयतथ्य की तारतम्यता में कोई कमी है? उदाहरण दें।
- 3. क्या अवधारणाएं, सिद्धातों, प्रक्रियाओं आदि गलत दी गई है? यदि उत्तर हाँ में हो तो गल्तियों का प्रारूप बताए (छपाई में गल्तियों को भी सम्मिलित करें)
- 4. क्या दिया हुआ पाठयक्रम निर्धारित पाठयक्रम से मिन्न है ? हॉ/नहीं यदि उत्तर हॉ में है तो उसके उदाहरण दें।
- 5. क्या सामग्रियों का नवीनीकरण में कमी है? यदि ऐसा है तो इसका उदाहरण दें।
- 6. क्या विषय-वस्तु सभी अनुदेशात्मक उदेश्यों को पूरा करता है? हॉ/नही अपने द्वारा दिए गए उत्तर हॉ/नही के अनुसार निरूपरण करें।
- 7. यदि पाठ/अनुदेशात्मक सामग्रियों में कहीं ऐतिहासिक तथ्य, पहेलियो, भ्रान्तियों तथा दूसरे प्रकार की मनोरंजन सामग्रियाँ दृष्टिगत हो तो उनके उदाहरण दें।

## 2.विषय-वस्तु का समायोजनः-

- 1. विभिन्न पृष्ठो पर यदि कोई अनुक्रम विषय-वस्तुओं की जोड-बन्दी सही न हो तो उन किमयों पर टिप्पणी करते हुए पृष्ठानुसार उन का उदाहरण दें।
- 2. किन्ही पृष्ठो पर मनोवैज्ञानिक समायोजन में कोई कमी नजर आये तो उस पर टिप्पणी करते हुए पृष्ठानुसार उदाहरण दें।
- 3. क्या विभिन्न पाठय-सामग्री, अनुदेशकों को पाठन प्रविधी में सहायक होगें? इस पर टिप्पणी करें।

#### विवरण:-

- 1. वैसे पृष्ठों पैराग्राफों की संख्या का उल्लेख करे जिनमें विवरण अपर्याप्त हो।
- 2. वैसे पृष्ठों पैराग्राफो की संख्या का उल्लेख करे जिनमें भाषा की गल्तिया, कितनाइया एवं भाषा अस्पष्ट हो।
- 3. वैसे पृष्ठो/पैराग्राफो की संख्या का उल्लेख करे जिनमें लिखावट के तरीके जिवन्त न हो, जिसको पढ़ने से जिज्ञासा उत्पन्न न हो तथा एक वाक्य से दूसरे वाक्य में सामन्जस्य न हो।
- 4. वैसे पृष्टो/ लाइनों की संख्या का उल्लेख करें जहाँ प्रयोग में लाये गये चिन्हों एवं जिसका, शब्द-संक्षेपण सर्वमान्य न हो।
- 5. वैसे पृष्ठो/लाइनों की संख्या का उल्लेख करें जहाँ प्रयोग किये गये भाषा शब्द का स्तर निम्न कोटि का हो।

## 4 दृष्टान्तः-

- 1. वैसे पृष्ठों/पैराग्राफो की संख्या का उल्लेख करे जहाँ प्रयोग किये गये दृष्टान्त अपर्याप्त है, या निरर्थक है।
- 2. वैसे पृष्ठो /पैराग्राफो की संख्या का उल्लेख करे जहाँ दिए गए दृष्टान्त गलत हो।
- 3. वैसे पृष्ठों/पैराग्राफो की संख्या का उल्लेख करे जहाँ किया गया दृष्टान्त उचित न हो।

#### 5. अभ्यासः-

- 1. वैसे पाठय संख्याओं का उल्लेख करे जिस में अभ्यास की कमी हो या बहुत ही ज्यादा अभ्यास दिया गया हो।
- 2. वैसे पाठय संख्याओं का उल्लेख करे जिसमें अभ्यास की विविधता न हो।
- 3. वैसे पाठय संख्याओं का उदाहरण सहित उल्लेख करे जिसमें अवास्तविक वस्तुस्थिति का वर्णन हो।
- 4. वैसे पाठय संख्याओं का उल्लेख करें जिसमें अभ्यासों का असंगत विस्तार किया गया हो।
- 5. वैसे पाठय संख्याओं का उल्लेख करे जिसके अभ्यासों को निम्न स्तर का वर्गीकृत किया गया हो या वर्गीकृत ही न किया गया हो।

### 6. उत्तर:-(केवल गणित के लिए)

1. वैसे पाठों की संख्या का उल्लेख करे जिसमें उत्तर देने का समुचित प्रवधान न हो।

## 7. मूल्यांकन सामग्री:-

1. वैसे पाठय संख्याओं का उल्लेख करे जिसमें मुल्यांकन सामग्री की कमी हो।

पठन -पाठन सामग्रियों के विश्लेषण के अगले क्रम में गल्तियों/अशुद्धताओं का संशोधन एवं उसके कमजोर पहलुओं को हटाया जाता है। तदोपरान्त विषय-वस्तु से सम्बन्धित सहायक सामग्रियों को विकसित (तेज बच्चों/ मन्दगति से पढने वाले बच्चों की जरूरतो के अनुसार) करके पाठय क्रम में शामिल किया जाता है।

# अनौपचारिक शिक्षा केन्द्र के बच्चों की उपल्बिधयों का मूल्यांकन

श्री ईश्वर चन्द्र (प्रवक्ता सलेक्शन ग्रेउ) अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा विभाग (राष्ट्रीय शैक्षिक अनुसंघान एवं प्रशिक्षण परिषद) नई दिल्ली-110016 ने इस प्रकरण पर प्रतिभागियों से विचार विमर्श करके इस प्रकरण को अन्तिम रूप दिया, जिस का विस्तृत विवरण परिशिष्ट-4 में सनिहित है।

श्री ईश्वर चन्द्र जी ने स्पष्ट किया कि अनौपचारिक शिक्षा केन्द्र के बच्चों का मूल्यांकन का स्वरूप औपचारिक विद्यालयों के बच्चों के मूल्यांकन से भिन्न होता है। अनौपचारिक शिक्षा पद्धित में दक्षताओं की उपल्बिधयों का विशेष महत्व है। अतः उपचारक शिक्षण, अनौपचारिक शिक्षा का एक महत्वपूर्ण घटक है। इस दृष्टिकोण से मूल्यांकन अनौपचारिक प्रणाली में सतत एव व्यापक रूप से होते रहना चाहिए। जहाँ मुख्य रूप से अनौपचारिक शिक्षा में व्यक्ति व्यवहार के तीनो पहलुओं (सज्ञात्मक, भावात्मक एवं मनोकृयात्मक) पर विशेष ध्यान दिया जाता है वही औपचारिक शिक्षा में व्यक्ति व्यवहार के केवल संज्ञानात्मक पहलु पर ही जोर दिया जाता है। जबिक शिक्षण में भावनात्मक एवं मनोकृयात्मक पहलुओं का भी उतना ही महत्व है जितना कि संज्ञानात्मक पहलू का।

तदोपरान्त श्री ईश्वर चन्द्र जी ने अनौपचारिक शिक्षा से सम्बन्धित विभिन्न प्रकार के जाँच प्रश्नों के सम्बन्ध में बतलाया। विशेषकर किस स्वरूप का जाँच-प्रश्न किस खास परिस्थिति में बहुत उचित होगा, इसकी विस्तृत जानकारी दी। विभिन्न प्रकार के जाँच-प्रश्नों का विवरण परिशिष्ठ-6 में संनिहित है।

उन्होंने आगे बतलाया कि बच्चों की कार्यक्षमता एवं उपल्बिधयों के मूल्यांकन के लिए जॉच-प्रश्न एक प्रमुख साधन है। श्री ईश्वर चन्द्र जी ने अच्छे प्रश्नों की विशेषताओं पर विस्तृत रूप से विवेचन किया। प्रश्नों (मौखिक या लिखित)के द्वारा हम बच्चों के दक्षता उपल्बिधयों का (प्राथमिक एवं उच्च प्राथमिक स्तर) सही तरीके से मापन कर सकते है। अच्छे प्रश्नों की गुणवत्ता का विवरण प्रतिवेदन के अन्त में परिशिष्ट -5 में दिया गया है।

इस पूरे सत्र में प्रतिभागियों को तीन समूहों में बॉटकर उनके रूचि के अनुसार तीनो विषयों - भाषा, गणित एवं पर्यावरण अध्ययन के लिए अच्छे जॉच-प्रश्नों का निर्माण किया गया। तदोपरांत तीनो समूहों द्वारा अलग-अलग विषयों पर निर्मित जॉच-प्रश्नों को सामूहिक सत्र में विचार-विमर्श करके उसे विषय-वस्तुगत एवं उदेश्यपूर्ण बनाया गया।

#### समापन सत्र:-

ये सत्र, उन्नमुखीकरण कार्यक्रम के अन्तिम चरण में दिनांक 17.11.99 को अपराहन 2:30 बजे शुरू किया गया। इस सत्र के अन्तर्गत सर्वप्रथम डाँ0 पुरूषोत्तम कुमार (कार्यक्रम समन्वयक) ने इस कार्यक्रम में आए सभी प्रतिभागियों एवं संसाधन व्यक्तियों को धन्यवाद दिया, जिन्होंने इस उन्नमुखीकरण कार्यक्रम को सफल बनाने में अपना महत्वपूर्ण योगदान दिया। साथ ही डाँ0 कुमार ने श्री दिपाँकर राय (शिक्षण-क्रम निदेशक) को विशेष रूप से धन्यवाद दिया, जिन्होंने आए हुए प्रतिभागियों एवं संसाधन व्यक्तियों के लिए ठहरने एवं खाने-पीने की व्यवस्था बहुत ही उत्तम एवं प्राकृतिक परिवेश में किया था।

इसी सत्र के अन्तर्गत तीन प्रतिभागियों ने इस उन्नमुखीकरण कार्यक्रम के संबन्ध में अपने-अपने विचार व्यक्त करते हुए कहा कि इस उन्नमुखीकरण कार्यक्रम के द्वारा हमें विषय-वस्तुगत आधारित बहुत सारी नई बातों की जानकारियाँ मिली। जहाँ तक ठहरने एवं खाने पीने की व्यवस्था का सवाल है तो, कार्यक्रम समन्वयक महोदय ने "जंगल में मंगल" वाली कहावत को चरितार्थ कर दिया। यह सत्य है कि हम स्वैच्छिक संस्था वाले कार्यकर्ता जमीन पर रहते हुए जमीनी बच्चों की शिक्षा के लिए कार्य करते है। इसलिए यह जरूरी हो जाता है कि, अनौपचारिक शिक्षा से सम्बन्धित किसी भी तरह का उन्नमुखीकरण अथवा प्रशिक्षण शिविर का आयोजन करना हो तो ग्रामीण परिवेश या स्वैक्षिक संस्था के कार्य स्थल पर किया जाना चाहिए, जिससे कि भाग लेने वाले प्रतिभागी अपने कार्य-क्षेत्र से अपने को जुड़ा हुआ महसूस कर सकें।

एक प्रतिभागी ने कहा कि इस उन्नमुखीकरण कार्यक्रम से हम लोग इतना दक्ष हो गए है कि आगे से खुद हम लोग अपनी संस्था के कनिष्ठ कार्यकर्ता को प्रशिक्षण दे सकते है।

कार्यक्रम के समापन पर बोलते हुए श्री प्रसाद दास गुप्ता, (परियोजना समन्वयक) एम.एन.डी.ई. संस्थान, पोस्ट- माझी हीरा, जिला- पुरुलिया (पOबंगाल)ने कार्यक्रम की सफलता पर अपनी खुशी जाहिर किया। साथ ही सभी प्रतिभागियों को प्रोत्साहित करते हुए कहा कि आपको प्राथमिक शिक्षा के सार्वजनिकरण के उदेश्यों की प्राप्ति में आने वाले चुनौतियों का, दृढता पूर्वक सामना करना होगा। इसके लिए अनौपचारिक शिक्षा केन्द्रों के बच्चों को कार्य-परक एवं आनन्दमय तरीके से पढ़ाना होगा। अनौपचारिक शिक्षा में डॉट-फटकार का कोई स्थान नहीं होता। यदि कोई बच्चा किसी खास विषय या पाठ को समझ नहीं पाता तो अनुदेशक को पता करना चाहिए कि उसके कमजोर पहलु कौन से हैं जिसके कारण वह किसी विषय या पाठ को बच्चे को समझा नहीं पाता है। यदि किसी अनुदेशक में किसी खास विषय या पाठ को पढ़ाने की समझ स्पष्ट नहीं है तो, यह पर्यवेक्षक की कमजोरी मानी जाएगी। इसी प्रकार यदि किसी पर्यवेक्षक को किसी खास विषय वा परियोजना अधिकारी की कमजोरी मानी जाएगी।

इस उन्नमुखीकरण कार्यक्रम में मानव संसाधन विकास मन्नालय भारत सरकार के प्रतिनिधि के नही आने के कारण श्री निकुंज प्रकाश नारायण सिन्हा (उप-सचिव सह प्रामर्शी, राज्य संसाधन केन्द्र बिहार)ने स्वैक्षिक संस्थाओं के सामने आने वाली प्रशासिकय समस्याओं के निदान हेतु विषयों पर चर्चा किया। यह उन्नमुखीकरण कार्यक्रम दिनांक 17.11.99 संध्या 5 बजे समाप्त हो गया।

### परिशिष्ट -1

# अनौपचारिक शिक्षा के कार्यकर्ताओं का दायित्व एवं कर्तव्य\_

# क. परियोजना अधिकारी के दायित्व एवं कर्तव्यः-

- 1. परियोजना अधिकारी को पर्यवेक्षक संदर्शिका तथा अनुदेशक संदर्शिका के सम्बन्ध में स्पष्ट समझ होनी चाहिए, जिस से कि वे अपने क्षेत्र के अनौपचारिक शिक्षा केन्द्रो पर कार्यरत पर्यवेक्षको एवं अनुदेशको को उन के दायित्व एवं क्रियाकलापों के बारे में बता सके।
- परियोजना अधिकारी मुख्य रूप से पर्यवेक्षकों एव अनुदेशकों का प्रशिक्षक होता है। परियोजना अधिकारी का ये दायित्व होता है कि पर्यवेक्षको के प्रशिक्षण कार्यक्रम मे अनुदेशक संदर्शिका में सन्नहित क्रिया -कलापो को व्यवहारिक रूप मे प्रदर्शन करके पर्यवेक्षको को बतलायें।
- 3. यदि परियोजना अधिकारी, अनुदेशको के लिए कोई प्रशिक्षण कार्यक्रम का आयोजन करता है तो उसे इस बात पर ध्यान रखना चाहिए कि उस प्रशिक्षण कार्यक्रम का मुख्य प्रशिक्षण सायक सामग्री, अनुदेशक संदर्शिका पर आघारित हो। परियोजना अधिकारी उस प्रशिक्षण कार्यक्रम का मुख्य ससाधन व्यक्ति एवं मार्गदर्शक होता है।
- 4. परियोजना अधिकारी का यह दायित्व होता है कि उस के क्षेत्र के सभी अनौपचारिक शिक्षा केन्द्रों पर हर तरह की सुविधाए एवं पठन-पाठन सहायक सामग्रियों को उपलब्ध कराये।
- 5. परियोजना अधिकारी को अनौपचारिक शिक्षा के हर तरह के पठन-पाठन सामग्रियों के विषय-वस्तु से परिचित होने के लिए सक्षम संस्थओं (राज्य शैक्षिक अनुसंघान एवं प्रशिक्षण परिषद, राज्य संसाघन केन्द्र, राष्ट्रीय शैक्षिक अनुसंघान एवं प्रशिक्षण परिषद) के अनौपचारिक शिक्षा के क्षेत्र में अनुमवी व्यक्तियों या संदर्भ व्यक्तियों से सहायता लेनी चाहिए।
- 6. परियोजना अधिकारी का यह दायित्व एवं कर्तव्य है कि उस के द्वारा निर्माण या एकत्र किए गए अनुदेशात्मक सामग्रियों जैसे शिक्षण सहायक सामग्री, परिक्षण-वस्तु, चार्ट, छोटे-छोटे कथन इत्यादि को पर्यवेक्षकों के माध्यम से अनौपचारिक शिक्षा केन्द्रों पर भिजवाये।
- 7. परियोजना अधिकारी का यह भी दायित्व एवं कर्तव्य है कि अनौपचारिक शिक्षा केन्द्रों के अवलोकन एवं परिवेक्षण के साथ-साथ उस केन्द्र के बच्चों के मानसिक एवं बौधिक विकास का भी अवलोकन एवं परिवेक्षण करें।
- 8. परियोजना अधिकारी का एक प्रमुख दायित्व यह होता है कि अनीपचारिक शिक्षा केन्द्रों को सही तरीके से चलाने में क्षेत्रीय निवासियों से सहयोग प्राप्त करने हेतु पर्यवेक्षकों एवं अनुदेशकों को प्रशिक्षित एवं प्रोत्साहित करतें रहें।

# ख. पर्यवेक्षकों का दायित्व एवं कर्तव्यः-

- 1. पर्यवेक्षकों को अनुदेशकों के क्रिया-कलापो के बारे में स्पष्ट रूप से समझ एवं जानकारी होनी चाहिए जिस से कि वे अनुदेशकों को उनके कर्तव्य एवं दायित्वों के बारे में समझा सके।
- 2. पर्यवेक्षकों का यह दायित्व है कि वो ऐसे लोगो की एक सूची तैयार करे, जो अनौपचारिक शिक्षा केन्द्र को सही ढंग से चलाने में मदद कर सकें।
- उ. पर्यवेक्षको का यह दायित्व एवं कर्तव्य है कि वो विभिन्न संस्थाओं जैसे- विद्यालय, प्रौढ शिक्षा केन्द्र, पुस्तकालय, डाक-विभाग बैंक, स्वैक्षिक संस्थाओं आदि के अधिकारियों की एक सूची तैयार करें, जिससे कि पर्यवेक्षक के कार्यों के सम्पादन में सहायता मिल सकें।

# 4. अनुदेशकों के प्रशिक्षण कार्यक्रम हेतु पर्यवेक्षकों का दायित्व एवं कर्त्न्यः-

- 1. वैसे अनुदेशको को चुनना जो अपने कार्यो को करने में दक्ष हो।
- पर्यवेक्षको का व्यवहार अनुदेशकों के प्रति एक मार्गदर्शक एवं सहयोगी का होना चाहिए न कि इन्सपेक्टर की तरह।
- पर्यवेक्षकों का यह दायित्व है कि अनुदेशक संदर्शिका मे सन्निहत अनुदेशक के क्रिया-कलापों को व्यवहारिक रूप मे प्रदर्शन करके अनुदेशकों को प्रशिक्षित करें।
- 5. पर्यवेक्षकों का यह दायित्व एवं कर्तव्य है कि नए अनौपचारिक शिक्षा केन्द्र खोलने एवं सही ढंग से चलाने की परिकल्पना एवं प्रबन्ध कार्य करे।
- 6. पर्यवेक्षको का यह कर्तव्य है कि अन्य पर्यवेक्षकों से सम्पर्क करके एक दूसरे के अनुभवो का आपस में आदान-प्रदान करते रहें।
- 7. पर्यवेक्षको का यह दायित्व होता है कि वो परियोजना अधिकारी का मार्गदर्शन प्राप्त करते हुए, अनौपचारिक शिक्षा केन्द्रो की क्रिया-कलापों एवं घटनाओं की जानकारी परियोजना अधिकारी को देते रहें।

# 8. पर्यवेक्षक को अपने अधिनस्थ 10-12 अनौपचारिक शिक्षा केन्द्रो का परिवेक्षण करना हो तो:-

- 1. पर्यवेक्षक को चाहिए कि जितना सम्भव हो सके अधिक से अधिक बार अनौपचारिक शिक्षा केन्द्रों का परिवेक्षण करें।
- 2. पर्यवेक्षक जितनी बार भी अनौपचारिक शिक्षा केन्द्रों का परिवेक्षण करने जाता है, केन्द्र के परिवेक्षण के साथ-साथ केन्द्र से सम्बन्धित सामुदायिक लोगों से मिले-जुलें।
- 9. पर्यवेक्षक का यह एक मुख्य दायित्व है कि अनौपचारिक शिक्षा कार्यक्रम का अवलोकन एवं मूल्यांकन करने वाले अधिकारी को पर्यवेक्षक के आधीन आनेवाले सभी अनौपचारिक शिक्षा केन्द्रों से सम्बन्धित सही-सही सभी सूचनाओं को उपलब्ध कराएं।

# ग. अनुदेशकों का दायित्व एवं कर्तर्व्यः-

- 1. अनुदेशको का यह दायित्व है कि अपने क्षेत्र के ग्राम निवासियों से सम्पर्क कर उन्हें प्रोत्साहित करे कि वो अपने बच्चों को अनौपचारिक शिक्षा केन्द्र में पढ़ने के लिए भेजें।
- 2. अनुदेशकों का यह कर्तव्य है कि अपने अनौपचारिक शिक्षा केन्द्र में बच्चों के नामांकन में बढोत्री के लिए उस क्षेत्र/गाँव के प्रभावशाली व्यक्तियों से सहायता लें।
- 3. अनुदेशको का कर्तव्य होता है कि वो स्वय् के ज्ञान को बढाये।
- 4. अनुदेशकों को विभिन्न प्रकार के फार्मी को भरना जानना चाहिए जो कि उसे अपने पर्यवेक्षको एवं परियोजना अधिकारी को देने होते है।
- 5. अनुदेशको को अनौपचारिक शिक्षा केन्द्र से सम्बन्धित विभिन्न प्रकार के कार्यों के लिए अलग-अलग रिजस्टर तैयार करना चाहिए।
- 6. अनुदेशको को परियोजना अधिकारी या पर्यवेक्षक द्वारा बुलाई गयी सभी बैठकों में भाग लेना चाहिए।
- अनुदेशकों के लिए होने वाले प्रशिक्षण्/उन्नमुखीकरण कार्यक्रमो में अनुदेशको को अवश्य शामिल होना चाहिए।
- 8. अनौपचारिक शिक्षा केन्द्रों के सभी बच्चों का अलग-अलग प्रगति प्रतिवेदन- पुस्तिका तैयार करके उस में आवश्यक जानकारियों को भरना अनुदेशकों का प्रमुख दायित्व होता है।
- 9. अनौपचारिक शिक्षा केन्द्रो का अवलोकन करना।
- 10. केन्द्र के बच्चों की शैक्षिक दक्षता में विकास के लिए उन्हें पढाना।
- 11. केन्द्र के बच्चों की दक्षता का मूल्यांकन करना।
- 12. अनौपचारिक शिक्षा केन्द्र के बच्चो का शैक्षिक दक्षता से सम्बन्धित कमजोरियों का पता लगाकर उनको दूर करने की कोशिश करना।
- 13. केन्द्र के बच्चो को पढने एवं अपने पढाई को जारी रखने के लिए प्रोत्साहित करते रहना।
- 14. केन्द्र के बच्चों को पुस्तकालय, जन-संसार के साधन जैसे टी.बी., समाचार पत्र, रेडियो आदि से परिचित करना।
- 15. अनौपचारिक शिक्षा केन्द्र से सम्बन्धित शैक्षिक एवं प्रशासनिक समस्याओं के समाधान हेतु अनुदेशक को ग्राम-शिक्षा समिति के सदस्यों, स्थानीय विद्यालय शिक्षको, डाक्टर, पोस्टमास्टर आदि से सहायता लेनी चाहिए।

### परिशिष्ट - 2

### प्राथमिक स्तर पर न्यूनतम अधिगम स्तर

#### भाषा:-

#### 1.स्ननाः-

- 1. सरल परिचित एवं प्रचलित पदों, कविताओं तथा कहानियों को सुनकर समझता है।
- 2. परिचित परिस्थितियों में हुए वार्तालापों एवं संवादों को समझता है।
- 3. परिचित परिस्थितियों में दिए गए मौखिक अनुरोधों एवं सरल आदेशों को समझता है।
- 4. वर्णन, विवरण, शब्द-खेल एवं पहेलियों को सूनकर समझता है।
- 5. परिचित परिस्थितियों में दिए गए सरल भाषणों को सूनकर समझता है।
- 6. विद्यालय के आयोजनो एवं प्रतियोगिताओं में हुए कविता पाठ, नाटक एवं वाद-विवाद को सुनकर समझता है।
- 7. सरल क्रियाओं को करने तथा खेल खेलने के मौखिक निदेशों को समझता है।
- 8. किसी क्रिया को सम्पन्न करने के लिए एक के बाद एक दिए गए मौखिक र्निदेशों को समझता है।
- 9. किसी सामूहिक क्रिया-कलापों को सम्पन्न करने के लिए दिए गए र्निदेशों को समझता है।

#### 2. बोलना:-

- 1 सरल वाक्यों को सही सही दोहराता है।
- 2. सरल पदों, कविताओं एवं गीतों को सामूहिक रूप से, हाव-भाव एवं क्रियाओं के साथ सुनता है।
- 3. हॉ/नही उत्तर वाले सरल प्रश्नों के उत्तर देता है।
- 4. भाषा की सभी ध्वनियों का उच्चारण करता है।
- 5. सरल प्रश्नों के उत्तर पूरे पूरे वाक्यों में देता है।
- 6. शुद्ध उच्चारण के साथ बोलता है।
- 7. सरल, परिचित कहानियों को उचित हाव-भाव एवं अनुतान, बलाघात के साथ सुनता है।
- 8. परिचित एवं अपरिचित वस्तुओं के विषय में वर्णन करता है।
- 9. बिना रूके प्रवाह के साथ स्वाभाविक रूप से बोलता है।
- 10. प्रभावशाली ढंग से कविता-पाठ करता है।
- 11. सरल एवं परिचित विषयों पर बोलता है।
- 12. परिस्थितियों एवं घटनाओं का वर्णन करता है।
- 13. सरल एवं अधिक जटिल प्रश्न पूछता है।
- 14. परिचित वस्तुओं के विषय में जानकारी प्राप्त करता है।
- 15. कक्षा में होने वाले नाटकों, सहज चर्चा एवं वाद-विवाद प्रतियोगिता में भाग लेता है और औपचारिक घोषणाएं करता है।

- 3. पढना:- 1. वर्णमाला के अक्षरों, कम परिचलित एवं संयुक्त वर्णी को पहचानता है।
  - 2. श्यामपट पर हस्तिलिखित सामग्री, छपाई के मोटे अक्षरों वाले फ्लैश-कार्डी आदि को पढ लेता है।
  - 3. सरल परिचित शब्दों का स्वर वाचन करता है (शब्द तीन वर्णों से अधिक के न हो)
  - 4. मोटे एवं छोटे अक्षरों मे छपी विषय सामग्री को पढ लेता है।
  - 5. पदों, कविताओ, गीतों एवं सरल कहानियों का स्वर वाचन करता है।
  - 6. रास्ते पर चलने के संकेत, विज्ञापन-पटों एवं सूचना-पटों पर सरल सूचनाओं को पढता है।
  - 7. दूसरे बालकों के हाथ की लिखी हुई सामग्री पढता है।
  - 8. सरल कहानियों की पुस्तकें तथा अन्य बाल पुस्तकें पढता है।
  - 9. कार्ट्न, कामिक्स और पोस्टर पढता है।
  - 10. हाथ के लिखे हुए पत्रों को पढता है।
  - 11. बाल पत्रिकाएं पढता है।
  - 12. सरल आकृतियाँ, चार्ट एवं नक्शें पढता है।
  - 13. छपी हुई और हाथ की लिखी हुई पठन सामग्री को सहजता से पढता है।
  - 14. अखबार एवं अन्य छपी हुई पठन सामग्री पढता है।
- 4. लिखना:- 1. दिए गए स्वर, व्यजंन, मात्रा एवं संयुक्ताक्षरों को देखकर लिखता है।
  - 2. स्वर, व्यजंन, मात्रा एवं संयुक्ताक्षरों का श्रुत्तलेखन करता है।
  - 3. सरल परिचित शब्द एवं वाक्य लिखता है।
  - 4. दिए गए शब्दों एवं वाक्यों को देखकर लिखता है।
  - परिचित शब्दों का श्रुतलेखन करता है।
  - र्निदेशानुसार सरल वर्णनात्मक वाक्य लिखता है।
  - 7. अक्षरो एवं शब्दों के सही आकार, क्रम तथा अक्षरों और शब्दों के बीच की दूरी के सही अंतर को समझता है।
  - 8. अपरिचित शब्दों का श्रुतलेखन करता है।
  - 9. र्निदेशानुसार सरल अनुच्छेद अथवा निबंघ लिखता है।
  - 10. साफ-साफ और स्फट लिखता है।
  - 11. सरल विराम चिन्हों सहित श्रुतलेखन करता है।
  - 1.2. र्निदेशानुसार अनुच्छेदो और विराम चिन्हों का प्रयोग करते हुए निबंध लिखता है।
  - 13. सही प्रारूप एवं सही दूरी के साथ लिखता है।
  - 14. सभी विराम चिन्हों का प्रयोग करते हुए श्रुतलेखन करता है।
  - 15. संक्षिप्त और स्वतंत्र निबंध लेखन करता है जिसमें सरल अनौपचारिक पत्र तथा संवाद भी सम्मिलत है।

### 5. विचारों का बोधनः- (सुनकर और पढकर)

- 1. मौखिक रूप से संक्षेप में दी गई सरल सूचना का पुनः स्मरण करता है।
- २. सुनकर-"कौन" "कब"और "कहाँ" वाले प्रश्नों के उत्तर देता है।
- 3. बोली गई अथवा लिखी हुई संक्षिप्त सामग्री के घटना-क्रम को क्रिमक ढंग से पुनःस्मरण करता है।
- 4. सुनकर "क्या" और "कैसे" वाले प्रश्नो के उत्तर देता है।
- बोली गई अथवा लिखी हुई सामग्री में से प्रमुख विचारों को पकड पाता है।
- 6. किसी सामग्री को सुननें या पढने के पश्चात ''क्यों'' वाले प्रश्नों के उत्तर देता है।
- 7. मौखिक अथवा लिखित सामग्री में व्यक्त विचारों एवं घटनाओं के बीच सरल कार्य, कारण-सम्बन्धों को पहचानता है।
- 8. किसी सामग्री को सुननें अथवा पढ़ने के पश्चात "क्योंकि" "चूकि" का प्रयोग करते हुए प्रश्नों के उत्तर देता है।
- 9. मौखिक अथवा लिखित सूचना के आधार पर निष्कर्ष निकालता है।
- 10. किसी सामग्री को सुनने अथवा पढ़ने के पश्चात यदि ...... तो, यदि ...... नहीं तो का प्रयोग करते हुए सामग्री से सम्बन्धित प्रश्न पूछता है और उत्तर देता है।

#### 6. व्यवहारिक व्याकरण:-

- 1 शब्दो की अतिम ध्विन के आधार पर उनकी समानता को जानने के प्रति सचेत होता है।
- 2. शब्दों की आदि और अंत स्थिति तथा उसके उदगम (उपसर्ग, प्रत्यय और घातु) के आघार पर उसकी समानता जानने के प्रति सचेत होता है।
- 3. शब्दार्थ के आधार पर शब्दो के आपसी सम्बन्धों के प्रति सचेत होता है।
- 4. वाक्य रचना के सामान्य प्रयोग-सम्बन्धित नियमों को समझता है।
- 5. वाक्य-विन्यास की ईकाइयों के सामान्य प्रयोग-सम्बन्धी नियमों को समझता है।

### 7. स्व-अधिगमः-

- 1. जहाँ उपलब्ध हो वहां चित्रो वाली सरल शब्द सूची का प्रयोग कर सकता है।
- 2. जहाँ उपलब्ध हो वहाँ चित्रों वाले सरल विश्वकोश का प्रयोग कर सकता है।
- 3. जहाँ उपलब्ध हो वहाँ बच्चो के चित्रमय शब्दकोश का प्रयोग कर सकता है।
- जहाँ उपलब्ध हो वहाँ बाल शब्द कोश का प्रयोग करता है।
- 5. जहाँ उपलब्ध हो वहाँ बाल विश्वकोश का प्रयोग कर सकता है।

#### 8. भाषा-प्रयोगः-

- विज्ञमता, आदर आदि व्यक्त करने वाले सरल प्रयोगो को समझता है और उनका प्रयोग करता है।
- 2. वित्रमता से बात करता है तथा वार्तालाप करते समय ध्यान से सुनता है।
- 3 समूह में अपनी बारी आने पर ही बोलता है।
- औपचारिक एवं अनौपचारिक भाषा के भेद को समझता है।
- 5. औपचारिक एवं अनौपचारिक परिस्थितियों के अनुरूप उपयुक्त भाषा का प्रयोग करता है।

### 9. शब्दावली नियत्रण:-

- 1. पढकर समझने का लगभग 2000 शब्दों का शब्द भण्डार अर्जित करता है।
- 2. पढकर समझने का लगभग 3000 शब्दो का शब्द भण्डार अर्जित करता है।
- 3. पढकर समझने का लगभग 4000 शब्दों का शब्द भण्डार अर्जित करता है।
- 4. पढकर समझने का लगभग 5000 शब्दो का शब्द भण्डार अर्जित करता है।

# परिशिष्ट -2 प्राथमिक स्तर पर न्यूनतम अधिगम स्तर

#### गणित:-

### 1. पूर्ण संख्याओं एवं संख्यांकों को समझनाः-

- 1. वस्तुओं एवं चित्रों की सहायता से 1 से 100 तक के संख्याँक पहचानता है और संख्याओं को संख्यांकों से मिलाता है।
- 2 .सुन्य को "कुछ नही होने" अथवा "समूह में वस्तु के "न होने" के रूप में पहचानता है।
- 3. 1 से 20 तक की संख्याओं का इकाई और दहाई में विस्तार करके उनके स्थानीय मान की समझ ्रादर्शित करता है।
- 4. 1 से 100 तक की संख्याओं को बढते क्रम (आरोही) तथा घटते क्रम (अवरोही )में रखता है।
- 5. 1से 100तक के संख्यांकों में से किसी संख्यांक के पहले का, किसी के बाद का, तथा किन्हीं दो के बीच का संख्यांक पहचानता है।
- 6. 1से 100तक की संख्याओं की ''कम'' ''ज्यादा'' बराबर ''सबसे ज्यादा'' "सबसे कम'' शब्दों का प्रयोग करके तुलना करता है।
- 7. 1से 100तक के संख्यांको को लिखता है।
- 8. 10से 99तक की दो अको वाली संख्याओं का इकाई और दहाई में विस्तार करके उनके स्थानीय मान को समझता है। एवं बताता है।
- 9. 1से 10तक की क्रम सूचक संख्याओं (1,2,3)की समझ प्रदर्शित करता है।
- 10. दी गई वस्तुओं की संख्या, उन्हें दो-दो, पॉच-पॉच, दस-दस के समूहों में गिनकर पता लगाता है। (वस्तुओं की संख्या सौ से अधिक न हो)
- 11. 100 से 1000तक के संख्यांक पचानता है एवं लिखता है।
- 12. 100 से 9999 तक की संख्याओं का इकाई दहाई और सैकडा में विस्तार कर तीन अंको की संख्या के स्थानीय मान की समझ प्रदर्शित करता है।
- 13. 100 से 1000तक की संख्याओं को बढते क्रम (आरोही)व घटते क्रम (अवरोही) में रखता है।
- 14. 100 से 1000 तक के संख्याओं को किसी संख्या के पहले, बाद तथा किन्हीं दो संख्याओं के बीच के सख्याँक के रूप में पहचानता है।
- 15. 100से 1000तक की संख्याओं में गणितीय चिन्हों >,<,= का प्रयोग करते हुए तुलना करता है।
- 16. सम और विषम संख्याओं की समझ प्रदर्शित करता है।
- 17. क्रमिक संख्याओं (11-100) की समझ प्रदर्शित करता है।
- 18. 1000 से 10,000तक के संख्यॉक पहचानाता है व लिखता है।
- 19. 1000 से 9999तक की संख्याओं का इकाई, दहाई, सैकडा और हजार में विस्तार करके चार अंको की संख्याओं के स्थानीय मान की समझ प्रदर्शित करता है।
- 20. 1000 से10,000 तक की संख्याओं को बढते क्रम (आराही) व घटते क्रम (अवरोही)में रखता है।
- 21. 1000 से 10,000 में से किसी संख्या के आगे का, किसी के पहले का तथा किसी दो संख्यांकों के बीच का संख्यांक पहचानता है।

- 22. 1000से 10,000 तक की संख्याओं में गणितीय चिन्हों >,<,=को लगागर तुलना करता है।
- 23. किसी संख्या के गुणज एव गुणनखंड की समझ प्रदर्शित करता है।
- 24. 50 तक की अभाज्य संख्याओं की समझ प्रदर्शित करता है।
- 25. 10,000से 10000000(एक करोड)तक की सख्या पहचानता है व लिखता है।
- 26. 10,000 से 999999 तक की संख्याओं का इकाई, दहाई, सैकडा, हजार, दस हजार तथा लाख में विस्तार करके संख्याओं की स्थानीय मान की समझ प्रदर्शित करता है।
- 27. 10,000 से 100000तक की संख्याओं को बढ़ते क्रम (आरोही) व घटते क्रम में (अवरोही) मे रखता है।
- 28. 10,000 से 100000 तक के संख्योंकों में से किसी संख्योंक के आगे का, किसी संख्योंक के पहले का तथा किन्हीं दो संख्याओं के बीच का संख्योंकं पहचानता है।
- 29. 10,000से 999999 तक की संख्याओं में गणितीय चिन्हों >,<,= का प्रयोग करते हुए तुलना करता है।
- 30. 100 से कम दो अको वाली सख्याओं का महत्म समापवर्तक निकालता है।
- 31. दो या तीन संख्याओ का लघुतम समापर्वर्तक निकालता है।

### 2.पूर्ण संख्याओं को जोडने, घटाने, गुणा व भाग करने की योग्यता:-

- 1. 0 से 18 तक की सख्याएं जिनका जोड 18 से अधिक न हो।
- 2. बडी संख्याओं में से छोटी सख्या अलग करने तथा दोनो संख्याओं का अंतर जानने के लिए 0 से 18तक की संख्याओं में घटाने की संक्रिया करता है।
- 3. गणितीय चिन्हों +, -,= की व्याख्या करता व लिखता है।
- 4. जोडने व घटाने के कौशलों द्वारा दैनिक जीवन की समस्याओं को मौखिक रूप से हल करता है।
- 5. दो अंको वाली दो या तीन संख्याओं को जिनका योगफल 99 से अधिक न हो, बिना हासिल के तथा हासिल के साथ जोडता एवं घटाता है।
- 6.0 से 18 तक दो संख्याओं को जिनका योगफल 18 से अधि न हो, मौखिक रूप से जोडता व घटाता है।
- 7. गुणा के प्रत्यय की बार बार जोड़ने की क्रिया के रूप में समझ को प्रदर्शित करता है।
- 8. गुणा के चिन्ह X की व्याख्या करता है एवं लिखता है।
- 9. दो, तीन, चार, पाँच और दस के पहाडे मौखिक रूप से व्यक्त करता है व लिखता है।
- 10.,एक चरण में हल होने योग्य दैनिक जीवन की समस्याओं को दो,तीन,चार, पाँच और दस के पहाड़े की सहायता से हल करता है।
- 11. तीन अंको वाली दो या तीन संख्याओं को हासिल के साथ जोडता एवं घटाता है। जिनका योगफल 999 से अधिक न हो।
- 12. एक चरण में हल होने वाले दैनिक जीवन की समस्याओं को जोड़ने व घटाने की, बिना हासिल वाली संक्रिया द्वारा जिनमें कोई भी संख्या 50 से बड़ी न हो, मौखिक रूप से हल करता है।
- 13. 10 से 1000 की बीच की किन्हीं संख्याओं में, जो 10 व 100के गुण्य हो और जिनमें एक संख्या दो अंको की हो-तथा हासिल न लगानी पड़े, मौखिक रूप से जोड़ने व घटाने की संक्रिया करता है।

- 14. गूणा के प्रत्यय की बारबार जोडने की क्रिया के रूप में समझ प्रदर्शित करता है।
- 15. 2 से 10 तक के पहाडे मौखिक व लिखित रूप में जानता है।
- 16. 2 और 3 अंको की संख्याओं को एक अकीय संख्या से हासिल के साथ गुणा करता है।
- 17. "भाग" के प्रत्यय की बार बार घटाने की संक्रिया के रूप में समझ प्रदर्शित करता है।
- 18. 3 अंको वाली संख्या को 1 अंकीय संख्या से जिसमें न हासिल ली जाए न शेष बचें, भाग करता है।
- 19. एक चरण में हल होने वाली गुणा भाग की दैनिक जीवन की समस्याओं को हल करता है।
- 20. गुणा व भाग की संक्रियाओं पर आधारित दैनिक जीवन की उन समस्याओं को जो एक चरण में हल हो सके और जिनमें गुणनखण्ड और शतजट 1 से 10 तक तथा गुणनफल और भाज्य 100 से अधिक न हो, मौखिक रूप से हल करता है।
- 21. 4 अंको वाली संख्याओं मे हासिल लेकर घटाने की संक्रिया करता है।
- 22. उन दो संख्याओं मे मौखिक रूप से जोडने और घटाने से संक्रियाएं करता है, जो पूरे हजार में हो और जिनकी संख्या किसी भी संक्रिया में 10,000 से बड़ी न हो।
- 23. गुणा की संक्रिया की विभिन्न शब्दावली जैसे गुण्य; गुणक, गुणनफल को समझता है।
- 24. 2 और 3 अंकों की संख्या मे 2 अंको वाली संख्या से गुणा की संक्रिया करता है। जिनका

### गुणनफल

9999 से अधिक.न हो।

- 25. भाग की संक्रिया की विभिन्न शब्दावली तथा भाजक, भाज्य, भजनफल व शेष को समझता है।
- 26. किसी संख्या मे 100 की मौखिक गुणा करता है, गुणनफल 10,000 से अधिक न हो।
- 27. 1 या 2 चरणों में हल होने योग्य दैनिक जीवन की समस्याओं को जोडने, घटाने, गुणा व भाग की चार मूल गणितीय सिक्रयाओं में से किन्हीं दो पर आधारित हो और जिनमें योगफल, गुणनफल,और भाज्य 100 से अधिक न हो और गुनणखण्ड 10 से बड़े न हो तथा जिनमें न कोई हासिल लगे न शेष बचे, मौखिक रूप से हल करता है।
- 28. ऐकिक नियम का उपयोग करके साधारण समस्याएं हल करता है।
- 29. 5 और 6 अंको की दो से चार संख्याओं को जिनका योगफल 999999 से अधिक न हो, जोडता है एवं घटाता है।
- 30. किसी संख्या को तीन अंको तक की किसी संख्या से गुणा करता है (गुणनफल 999999 से अधिक न हो)।
- 31. 2 अंको वाली किसी संख्या से 4 अंको वाली संख्या में भाग देता है जिसमें शेषफल हो या न हो।
- 32. जोड़ने, घटाने, गुणा व भाग की चारो संक्रियाओं में से किन्ही दो पर आधारित दैनिक जीवन की एक या दो चरणों हल होने वाली समस्याओं को मोखिक रूप से हल करता है। जबिक योगफल गुणनफल और भाज्य 100 से अधिक न हो और गुणनफल 10 बड़े न हो और जिनमें न हासिल देने पड़े और न शेष बचे।
- 33. ऐकिक नियम का प्रयोग दैनिक जीवन की संरल समस्याओं को हल करने में करता है।
- 34. ''औसत'' के अर्थ की समझ प्रदर्शित करता है और औसत की गणना करता है।
- 35. दिए गए ऑकडो से उचाई, प्राप्तांक, वर्षा, उपस्थिति आदि के औसत की गणना करता है।

3. मुद्रा,लम्बाई, भार (वजन )धारिता, क्षेत्र एवं समय के इकाईयों को उपयोग करने व इनसे संबंधित दैनिक जीवन की साधारण समस्याओं को हल करने की योग्यता:-

#### मुद्रा

- 1. विभिन्न मूल्यों के मुद्रा सिक्के और नोट पहचानता है।
- 2. विभिन्न प्रकार के वास्तविक अथवा खिलौने वाले सिक्कों के मेल से एक रूपए तक के मूल्य की राशि बनाता है।
- 3. दस रूपए तक के एक चरण वाले दैनिक लेन-देन में वास्तविक या खिलैने वाली मुद्रा के सिक्कों व नोटो का प्रयोग करता है।
- 4. साधारण मुद्रा समस्याओं को जोडने व घटाने का प्रयोग करके, बिना मुद्रा परिवर्तन किए, हल करता है। (जैसे साधारण खरीदारी का लेखा-जोखा)।
- 5. दैनिक जीवन की समस्याओं को जिनमें एक रूपए तक पाँच व दस पैसों के गुणकों का हिसाब हो, मौखिक रूप से हल करता है।
- 6. एक चरण में हल हो सकने योग्य दैनिक जीवन की वे समस्याएं जिनमें 50 रूपए तक पूरे रूपयों का हिसाब हो, मौखिक रूप से हल करता है।
- 7. जोडने, घटाने, गुणा व भाग की चार संक्रियाओं में से किन्हीं दो पर आधारित, साधारण मुद्रा संबंधी समस्याएं जैसे- दुकानदारी के हिसाब रूपए पैसे में बदलने के साथ हल करता है।
- 8. क्रय-विक्रय संबंधी समस्याओं के हल करने में ऐकिक नियम का प्रयोग करता है।
- 9. दैनिक जीवन की मुद्रा संबंधी समस्याओं को जिनमें 50 रूपए तक के रूपए या पैसे की राशि का हिसाब हो, जोडने, घटाने, गुणा व भाग चारों में से किसी भी संक्रिया का प्रयोग करके मौखिक रूप से हल करता है।
- 10. लाभ/ हानि के सरल प्रश्न हल करता है।
- 11. लाभ/हानि सहित सरल मुद्रा संबंधी समस्याओ को हल करता है।
- 12. 5 वस्तुओं तक के दर और मात्रा दी हुई होने पर बिल बनाता है और उसकी व्याख्या करता है।
- 13. सरल ब्याज से संबंधित साधारण समस्याएं हल करता है।
- 14. दैनिक जीवन की एक चरण मेंं हल हो सकने वाली मुद्रा संबंधी समस्याओं को जिनमें 100 रूपये तक के रूपए पैसे का हिसाब हो, चार में से किसी भी गणितीय संक्रिया का प्रयोग करके मौखिक रूप से हल करता है।

### लम्बाई

- 1. अपने निकट के परिवेश में विभिन्न वस्तुओं की लम्बाई नापने के लिए अमानक इकाईयों जैसे-बालिश्त, कदम, छडी आदि का प्रयोग करता है।
- 2. मीटर और सेंटीमीटर के आपसी सम्बंध की समझ प्रदर्शित करता है।
- 3. परिवर्तन के बिना मीटर और सेंटीमीटर माप की दो लम्बाइयों को जोडता है।
- 4. बिना परिवर्तन किए, मीटर और सेंटीमीटर में व्यक्त दो लम्बाईयों में अतंर ज्ञात करता है।
- 5. परिचित वस्तुओं और छोटी दूरियों की, जो पाँच मीटर से अधिक न हो, लम्बाई का अमानक इकाईयों में अनुमान लगाता है।
- 6. किलोमीटर और मीटर के बीच का संबंध समझता है।
- 7. किलोमीटर को मीटर में और मीटर को सेंटीमीटर में बदलता है, तथा इसको विपरीत दिशा में भी बदलता है।

- 8. लम्बाई की मानक इकाईयों को एक दूसरे में बदलने, चार गणितीय संक्रियाओं में से किसी एक अंक के प्रयोग तथा एक अंक से गुणा व भाग किए जाने सम्बन्धी एक चरण में हल होने योग्य दैनिक जीवन की साधारण समस्याओं को हल करता है।
- 9. निकट परिवेश की वस्तुओ एवं छोटी दूरियों की लम्बाई को मीटर और सेंटीमीटर में नापता है।
- 10.परिचित वस्तुओ और छोटी दूरियो की लम्बाई का, जो **पॉ**च मीटर से अधिक न हो मानक और अमानक इकाईयों में अनुमान लगाता है और तुलना करता है।
- 11 किलोमीटर और मीटर या मीटर और सेंटीमीटर संबंधी एक चरण में हल हो सकने वाली सरल दैनिक समस्याओं को मौखिक रूप से हल करता है।
- 12. चार गणितीय संक्रियाओं में से किन्हीं दो पर आधारित लम्बाई की मानक इकाइयो को एक दूसरे में बदलकर उनसे संबंधित दैनिक जीवन की सरल समस्याओं को हल करता है।
- 13. निकट परिवेश में उपलब्ध वस्तुओं एव छोटी दूरियों में सरल और वक्र रेखाओं को मीटर व सेटीमीटर में मापता है।
- 14. किलोमीटर और मीटर या सेटीमीटर संबंधी एक चरण में हल होने वाले दैनिक जीवन की सरल समस्याओं को जिनमें कोई सख्या 100 से अधिक न हो, एक से दूसरे में बदलने, हासिल लेने और शेष बचने की जरूरत न पड़े तथा गुणा और भाग एक अंक की संख्या से की गई हो, मौखिक रूप से हल करता है।

#### भार (वजन)

- 1. निकट परिवेश की वस्तुओं को तौलने के लिए, खिलौना-तराजू का प्रयोग करके भार की अमानक इकाइयों जैसे- पत्थर, मनके आदि का प्रयोग करता है।
- 2. तौल की मानक इकाइयां जैसे- किलोग्राम और ग्राम (50 ग्राम, 100 ग्राम, 200 ग्राम, 500 ग्राम, 1 किलोग्राम व 2 किलोग्राम ) को पचानता है।
- 3. दो या तीन वस्तुओं का भार, जो किलोग्राम व ग्राम में दिए हो, एक दूसरे में बदले बिना जोडता है।
- 4. किन्हीं दो वस्तुओं के भार का अंतर, जबिक प्रत्येक वस्तु का भार किलोग्राम व ग्राम में व्यक्त किया गया हो, बिना इकाई परिवर्तन के ज्ञात करता है।
- 5. किलोग्राम को ग्राम में और ग्राम को क्रिलोग्राम में बदलता है।
- 6. किलोग्राम और ग्राम से संबंधित सरल दैनिक समस्याओं को मौखिक रूप से हल करता है, जो एक चरण में हल हो जाए, (कोई संख्या 50 से अधिक न हो)।
- 7. भार की मानक इकाइयों से संबंधित सरल दैनिक समस्याओं को, जो एक ही चरण में हल हो सकें, चार में से दो संक्रियाओं द्वारा हल करता है।
- 8. किलोग्राम और ग्राम से संबंधित सरल दैनिक समस्याओं को मौखिक रूप से हल करता है, जो एक चरण में हल हो जाए, जिसमें पूर्ण संख्या 100 से अधिक न हो।

### धारिता

- 1. धारिता की माप के लिए अमानक इकाइयो जैसे- प्याला,गिलास,बोतल आदि का प्रयोग करता है।
- 2. धारिता के माप की मानक इकाइयों के बीच के संबंध समझता है जैसे लीटर और मीलीलीटर।
- 3. बिना एक को दूसरे में बदले लीटर और मीलीलीटर में व्यक्त दो या तीन द्रवों के परिमाणों को जोडता है और उनका अंतर ज्ञात करके लिखता है।

- 4. अमानक इकाईयों के संदर्भ में जैसे- प्याले, माचिस की डिबिया, बोतलें आदि द्वारा धारिता के छोटे परिमाणों का अनुमान लगाता है।
- 5. लीटर को मीलीलीटर और मीलीलीटर को लीटर मे बदलता है।
- 6. धारिता की इकाइयों से जुडी एक चरण वाली सरल दैनिक समस्याओं को चार में से किसी एक संक्रिया को प्रयोग करके जिनमे गुणा व भाग, माप एक अंक की संख्या से किया जाए तथा इकाई परिवर्तन भी करना पड़े, हल करता है।
- 7. लीटर व मीलीलीटर से संबंधित एक चरण वाले सरल दैनिक समस्यों को मौखिक रूप से हल करता है। जिनमें कोई संख्या 50 से अधिक न हो।
- 8. चार में से दो संक्रियाओं का प्रयोग करके धारिता की मानक इकाइयों से सबंधित सरल दैनिक समस्याओं को इकाई परिवर्तन करके हल करता है।
- 9. लीटर और मीलीलीटर से संबंधित सरल, एक चरण में हल होने योग्य दैनिक समस्याओ को,(जिनमें 100 से अधिक की सख्यां न हो) मौखिक रूप से हल करता है।

#### ন্ন

- 1. अमानक इकाइयों जैसे- ईट,टाइल,माचिस की डिब्बी आदि का प्रयोग करके आयाताकार वस्तुओं के पृष्ठ तल के क्षेत्रफल की गणना करता है।
- 2. वर्ग और आयताकार वस्तुओं जैसे- माचिस की डिब्बी, ईट, टाइल आदि द्वारा क्षेत्रफल के छोटे मापों का अनुमान (अमानक इकाइयों में) लगाता है।
- 3. निकट परिवेश में उपलब्ध आयताकार, वर्गाकार या त्रिभुजाकार आकृति की वस्तुओं के पृष्ठों जैसे-कक्षा का कमरा, कापी आदि को परिमिति मानक एवं अमानक इकाइयों में मापता है।
- 4. निकट परिवेश की वस्तुओं जैसे- स्लेट, कापी, कक्षा का कमरा, फर्श, खेल का मैदान आदि का क्षेत्रफल वर्ग सेंटीमीटर और वर्ग मीटर में निकालने के लिए सूत्र का प्रयोग करता है।
- 5.निकट परिवेश की वस्तुओं जैसे- स्लेट, कापी, कक्षा का कमरा, फर्श, खेल का मैदान आदि के छोटे पृष्ठ-तल के क्षेत्रफल का मानक तथा अमानक इकाइयों में अनुमान लगाता है व उसकी तुलना करता है।
- 6. उपयुक्त सूत्र का प्रयोग करके क्षेत्रफल एवं परिमिति से सम्बन्धित सरल दैनिक समस्याओं को हल करता है।
- 7.निकट परिवेश की वस्तुओ जैसे- स्लेट, कापी, कक्षा का कमरा, फर्श, खेल का मैदान आदि के क्षेत्रफल का मानक व अमानक इकाइयों में अनुमान लगाता है और उसकी तुलना करता है।

#### मय:-

- 1. सप्ताह में दिनों के नाम क्रमानुसार बताता है।
- 2. दिनों का सप्ताहों से, सप्ताहों का महीनों से एवं महीनों का वर्ष से सम्बन्ध जानता है।
- 3. महीनों के नाम क्रमानुसार बताता है।
- 4. घडी में समय को घंटा आधा घंटा चौथाई घंटा तथा पाँच मिनट के अंतराल के रूप में पढता है।
- 5. कलैण्डर की व्याख्या करता है।
- 6. घंटो और मिनटों के हिसाब से घड़ी पढ़ता है।
- 7. घंटों को मिनटों और मिनटों को घंटों में बदलकर आपस में जोडता है।

- 8. किसी क्रिया या घटना मे लगने वाले समय की गणना पूर्वाहन और अपराहन के भीतर करता है।
- 9. समय सबंन्धी उन सरल दैनिक समस्याओं को हल करता है, जिसमे हप्तें, दिन, घंटे और मिनट हो।

#### भिन्न, दशमलव एवं प्रतिशत का प्रयोग करने की योग्यता:-

#### भिन्न:-

- 1. स्थुल वस्तुओं, चित्रों एवं कागज मोडकर भिन्न का अर्थ, क्षेत्र (स्थानिक)के अंशं के रूप में मौखिक रूप से प्रदर्शित करता है।
- 2. समभित्र संख्याओं का अर्थ जिसमें अंश व हर 10 से अधिक न हो, की एक क्षेत्र (स्थानिक) के अंशके रूप में होने की समझ प्रदर्शित करता है।
- 3. किसी क्षेत्र के किसी भाग के रूप में भिन्न का अर्थ जिसका हर 20 से अधिक न हो, की समझ प्रदर्शित करता है।
- 4. सम-भिन्न संख्याओं को किसी समूह/समुच्चय के किसी भाग के रूप में जिसमें हर 10 से अधिक न हो और समृह 100 से अधिक न हो, होने के अर्थ की समझ दर्शाता है (जैस- 49 का 1/7)
- 5. किसी दी गई भिन्न के समत्ल्य भिन्न की समझ प्रदर्शित करता है जैसे- 1/2=2/4=4/8
- 6. समान हर वाले या समान अश वाले सम भिन्नों को बढ़ते क्रम व घटते क्रम मे रखता है।
- 7. मिश्र-भिन्न को विषम-भिन्न में तथा विषम-भिन्न को मिश्र-भिन्न में (हर 20 से अधिक न हो)बदलता है।
- 8. समान हर वाले सरल सम-भिन्नो को जोडता है व घटाता है।
- 9. सरल सम भिन्नों को जिनका हर 10 से अधिक न हो बढते एवं घटते क्रम में रखता है।
- 10. सरल भिन्नों को सरलतम (लघुत्तम) रूप में लाता है।
- 11. 10 तक "हर" वाली भिन्नो एवं मिश्र भिन्नो को जोंडने एवं घटाने की संक्रिया करता है।
- 12. अधिक प्रयोग में आने वाली भिन्नों के कुछ रूपों को मौखिक रूप से जोडता व घटाता है जैसे- 1/2+1/4=3/4
- 13. 10 तक हर वाली दो भिन्नों का गुणा व भाग करता है तथा उत्तर को लघुत्तम रूप में व्यक्त करता है।

#### दशमलव:-

- 1. भिन्नों तथा मिश्र भिन्नों को दो दशमलव स्थान तक की दशमलव संख्या मे तथा दशमलव संख्या को भिन्नों तथा मिश्र भिन्नों मे बदलता है।
- 2. तीन दशमलव स्थान तक दशमलव का जोड करता है।
- 3. तीन दशमलव स्थान तक लम्बाई, वजन और धारिता की मापों को दशमलव में व्यक्त करता है।
- 4. तीन दशमलव स्थानो तक की संख्या को एक अंक की संख्या से गुणा व भाग करता है, जिसका गुणनफल और भाज्य तीन दशमलव स्थानों से अधिक न हो।
- 5. दशमलवों को जोड़ने, घटाने व तुंलना करने के द्वारा लम्बाई, वजन और धारिता की माप आदि पर आधारित दैनिक जीवन की समस्यायें हल करता है।

#### प्रतिशतः-

- 1. भिन्न और दशमलव को प्रतिशत में और प्रतिशत को भिन्न के लघुत्तम रूप व दशमलव में बदलता है।
- 2. किसी दी गई संख्या या माप का प्रतिशत ज्ञात करता है।
- 3. प्रतिशत का प्रयोग करके दैनिक जीवन की सरल समस्याओं को हल करता है।
- 4. अधिकांश प्रयोग में आने वाले प्रतिशत को भिन्न में और भिन्न को प्रतिशत में बदलता है जैसे-50%=1/2,1/4=25%

### ज्यामितीय आकारों एवं स्थानिक सम्बन्धों को समझना:-

- 1. चार मूल आकृतियो जैसे वृत, त्रिभुज, वर्ग एवं आयत को पहचानता है एवं उसके नाम बताता है।
- 2. चारों ज्यामितीय आकृतियों की मूल विशेषताओं की समझ दर्शाने के लिए, हाथ से वृत्त, वर्ग, त्रिभुज एवं आयत बनाता है।
- 3. पर्यावरण की विभिन्न प्रकार की ठोस वस्तुओं को आकृति के आधार पर, बिना उनके ज्यामितीय नामकरण को पहचानता है तथा उनका वर्गीकरण करता है।
- 4. परिवेश में उपलब्ध केवल समतल, केवल वक्र-तल तथा दोनों प्रकार के तलों वाली वस्तुओं के नाम बताता है।
- 5.सीधे अथवा वक्र किनारों की वस्तुओं का प्रयोग करके वृत्त, वर्ग, त्रिभुज एवं आयत की समतल आकृतियाँ बनाता है।
- 6. परिवेश में उपलब्ध विभिन्न ठोस वस्तुओं को उनके ज्यामितीय नामों के साथ यथा-घन, घनाभ,गोला, बेलन और शंकु पहचानता है तथा उनका वर्गीकरण करता है।
- 7. सीधे अथवा वक्र किनारों की वस्तुओं का प्रयोग करके वर्ग,आयत, त्रिभुज एवं वृत्त की समतल आकृतियाँ बनाता है।
- 8. त्रिभुज, आयत और वर्ग की विशेषताएँ बताता है।
- 9. फूटे (पटरी) की सहायता से दी गई लम्बाई के रेखा-खण्ड नापता तथा खींचता है।
- 10.कोणों का सम-कोण, न्यून-कोण एवं अधिक-कोण में वर्गीकरण करता है।
- 11.परिवेश की वस्तुओं तथा उनके चित्रों में सम-कोण न्यून-कोण व अधिक-कोण की पहचान करता है।
- 12.विभिन्न मापों के कोण चांदे की सहायता से खींचता है।
- 13.कोण और भूजा के आधार पर त्रिभुजों का वर्गीकरण करता है-समिद्विबाह, विषमबाहु व समबाहु।
- 14.समित और असमित आकृतियों को पहचानता है।
- 15.पटरी आदि की सहायता से त्रिमुज, आयत एवं वर्ग खींचता है।
- 16.दी गई त्रिज्या का वृत्त परकार और पटरी की सहायता से खींचता है।
- 17.वृत्त से सम्बन्धित विभिन्न तत्वों (पदों) को तथा उनके आपसी सम्बन्ध को जानता है।
- 18.एक जोडी सरल आकृतियाँ एक दूसरे का प्रतिबिम्म है या नहीं, इस तथ्य को पहचानता है और परिवर्तन की रेखा खींच सकता है।
- 19.दो सरल आकृतियों में पहचानता है कि क्या एक को घुमाकर/पलटकर दूसरे की तरह दिखा सकते है।

# परिशिष्ट -2 प्राथमिक स्तर पर न्यूनतम अधिगम स्तर

#### पर्यावरण

### समाजिक एवं भौतिक परिवेश के सम्बन्ध में अपनी भलाई के बारे में जागरूकता अर्जित करता है

#### हमारा शरीर एवं उसकी स्वच्छता:-

- 1. शरीर के प्रमुख अंगों को पहचानता है।
- 2. शारीरिक स्वच्छता के महत्व को समझता है।
- 3. कपडों की आवश्यकता एवं मौसम के अनुसार कपडों के परिवर्तन को पहचानता है (जहाँ कहीं लागू हो)।
- 4. शीच एवं नहाने धोने आदि अच्छी आदतों सहित निजी स्वच्छता को अपनाता है।
- 5. पशु-पक्षी स्वयं को कैसे स्वच्छ रखते हैं, इसका अवलोकन करता है।

### हमारा भोजन एवं आवासः-

- 1. स्वास्थ्य के लिए भोजन के महत्व को समझता है।
- 2. अस्वच्छ भोजन एवं पानी तथा बीमारियों के बीचे आपसी सम्बन्ध को जानता है।
- 3. मकान एक आधरभूत आवश्यकता क्यों है, इस तथ्य को समझता है।
- 4. मकान तथा उसके आस-पास के परिवेश को साफ-सुथरा बनाने वाली गतिविधियों में भाग लेता है।
- 5. विभिन्न प्रकार के आवासों का जिसमें पशु-पक्षी एवं कीट-पतंगों के रहने की जगहे भी सिम्मिलित है, अवलोकन तथा उनकी तुलना करता है।

### सुरक्षा एवं संयत व्यवहार के नियम:-

- 1. घर, विद्यालय एवं सार्वजनिक स्थानों पर संयत व्यवहार का महत्व समझता है।
- 2. कतार में खड़ा होता है तथा अपनी बारी की प्रतीक्षा करता है।
- 3. सडक यातायात के प्रमुख चिन्हों को समझता है (संदर्भ के अनुसार)
- 4. सडक पर चलने के प्रमुख नियमों का पालन करता है।

# सामान्य दुर्घटनाओं से बचाव:-

- 1. अपने परिवेश में दुर्घटनाओं के लिए उत्तरदायी सामान्य परिस्थितियों को पहचानाता है।
- 2. दुर्घटना एवं असावधानी के बीच सम्बन्ध को जानता है।
- 3. दुर्घटना होने पर तुरन्त क्या किया जाना चाहिए, यह जानता है।

### बुरी आदतों एवं बुरे व्यक्तियों से बचाव:-

- 1. अपने इलाके के आम अपराधो जैसे- चोरी, डकैती, मारपीट, तोडफोड, दखलन्दाजी आदिको जानता है।
- 2. बुरी आदतों, बुरे आचरण एवं अपराधों के बीच सम्बन्ध को जानता है, जैसे- शराबखोरी, दादागिरी, दूसरों का ख्याल न करना आदि।
- 3. सम्भावित सुरक्षा और अपराधों की रोकथाम के उपायों का सुझाव दे सकता है।

### हमारा परिवार एवं पडोसी :-

- 1. परिवार के विभिन्न सदस्यों का स्वयं से तथा आपस में सम्बन्ध पहचानता है।
- 2. परिवार में तथा सम्बन्धियों एवं पडोसियों में अपने से बडों समव्यस्कों तथा अन्य के साथ शिष्ट व्यवहार करता है।

### हमारा पास-पडोस (महल्ला/गाँव):-

- 1. अपने पास-पडोस के प्रमुख सार्वजनिक स्थानों को (जैसे- विद्यालय, पंचायत घर आदि) पहचानता है तथा उनकी आवश्यकता जानता है।
- 2. विद्यालय जाने का महत्व समझता है और नियमित रूप से तथा ठीक समय पर विद्यालय में उपस्थित होता है।

# हमारे जीवन को सुखमय (आरामदेह)बनाने वाली नागरिक सुविधाएं:-

- 1. सार्वजनिक सुविधाओं जैसे अस्पताल, पुलिसथाना, डाकघर, पंचायत/नगर-निगम, कचहरी और बैंक के विषय में जानकारी हासिल करता है।
- 2. जिला स्तर के कुछ पदाधिकारियों जैसे- जिलाधिकारी, पुलिस अधीक्षक इत्यादि का महत्व जानता है।

### हम अपने स्थानीय नागरिक मामले कैसे निबटाते हैं:-

- 1. पंचायत एवं नगर पालिका की हमारे लिए क्या उपयोगिता है, यह ज्ञात करता है।
- २. पंचायत एवं नगर पालिका स्थानीय स्वशासन संस्थाएँ क्यों कहे जाते है, इस तथ्य को स्पष्ट करता है।

### हम अपना शासन कैसे चलाते है:-

- 1. केन्द्र, राज्य एवं स्थानीय स्वशासन के बीच मोटे तौर पर सम्बन्ध को समझता है।
- 2. संघ (केन्द्र) एवं राज्य सरकारों के विषय में सरल तथ्यों का विवरण देता है।
- 3. अपने देश की अनूठी विशेषताओं के लिए किए जाने वाले शब्दों के जैसे- ''प्रजातंत्र'' एवं 'संघ', अर्थ लतागा है।
- 4. प्रजातंत्र में मतदान के अधिकार का महत्व समझता है।

### कार्य में लगे विभिन्न लोगों के बारे में जानता है और कार्य-जगत के महत्व की सराहना करता है।

# विभिन्न कार्यो में लगे माता-पिता तथा परिवार के अन्य सदस्य:-

- 1. घर में कार्यरत परिवार के विभिन्न सदस्यों का अवलोकन करता है।
- 2. माता-पिता तथा परिवार के अन्य सदस्यों के आजीविका हेतु व्यवसायों को जानता है।
- 3. अपने संगी-साथियों से माता-पिताओं के व्यवसायों के विषय में चर्चा करता है।

#### पास-पड़ोस में होने वाले व्यवसाय:-

- 1. अपने पास-पडोस में होने वाले व्यवसायों का अवलोकन करता है तथा उनकी सूची बनाता है।
- 2. उन व्यवसायों की उपयोगिता ज्ञात करता है।
- 3. व्यवसायों में विविधता तथा उनकी आवश्यकता की सराहना करता है एवं जीवन में कार्य का महत्व समझता है।

# कुछ कार्यरत लोगों का जीवन एवं क्रियाकलापः आहार उत्पादनः-

- 1. दैनिक आवश्यकता की विभिन्न वस्तुओं के उत्पादन में लगे व्यवसायों की सूची बनाता है।
- 2. आहार की विभिन्न वस्तुओं के उत्पादन में लगे लोगों को पहचानता है जैसे- किसान, ग्वाला,मछुआरा, गडेरियाँ आदि।
- 3. उनके प्रमुख क्रिया-कलापों तथा रहन-सहन के तरीकों का वर्णन करता है।

#### विनिमार्णः आहार उत्पादनः-

- 1. वस्तुओं के विनिमार्ण का महत्व पहचानता है।
- 2. उन वस्तुओं से सम्बन्धि कुछ व्यवसायों को पहचानता है।
- 3. इस प्रकार के कार्यों में लगे हुए कुछ कामगारों के जीवन एव क्रियाकलापों के विषय में जानकारी एकत्रित करता है।
- 4. किसान के कार्यों की तुलना कारीगर के कार्यों से करता है।

### अन्य प्रमुख कामगारः आहार उत्पादनः-

- 1. यातायात एवं संचार में कार्यरत लोगों के कार्यों का महत्व समझता है जैसे- रेल, सडक व पुल निर्माण, आकाशवाणी, दूरदर्शन आदि।
- 2. व्यापार एव वाणिज्य का महत्व समझता है।
- 3. सैनिक, पुलिस, अध्यापक आदि के कार्यों का महत्व समझता है और उनके कार्यों की किसान तथा निर्माता के कार्य से तुलना करता है।
- 4. अनेक प्रकार के बढते हुए व्यवसायों के तथ्य को और उनकी पारस्परिक निर्भरता की सराहना करता है।

# मनुष्य एवं उसके परिवेश के बीच स्थानिक एवं परस्पर प्रभाव डालने वाले सम्बन्ध को समझता है तथा उसकी व्याख्या करता है:-

### हमारा स्थानीय परिवेश (गॉव/महल्ला):-

- 1. कुछ प्रमुख स्थानीय घरातलीय विशेषताएँ पहचानता है जैस-नदी, तालाब, पर्वत-श्रेणी,टीला आदि।
- 2. कुछ सामान्य पशु-पक्षियों तथा कीडों-मकोडो को पहचानता है।
- 3. अपने पास-पहोस में दूरियों को बहुत पास,पास, दूर, बहुत दूर, बाद और पहले के रान्दर्भ में अनुमान लगाता है।

### हमारा पास-पडोसः-

- 1. दिशाओं की जानकारी के लिए सूर्योदय एवं सूर्यास्त की सहायता लेता है।
- 2. मौसम की प्रकृति का ऋतुओं से तथा ऋतुओं का मनुष्य के क्रियाकलापों, पेड-पौधों तथा पक्षियों आदि से सम्बन्ध स्थापित करता है।
- 3. मनुष्य के द्वारा स्थानीय धरातलीय विशेषताओं के विभिन्न उपयोगो की सूचना एकत्रित करता है।

- 4. दिए गए स्थानीय रेखा-मानचित्र में प्रमुख स्थानों को पहचानता है।
- 5. स्थानीय परिवेश (पास-पडोस) के कुछ आमतौर पर पाए जाने वाले पेड, पक्षी एवं फसलें पहचानता है।

#### हमारा जिला:-

- 1. अपनी कक्षा के कमरे का रेखा चित्र बनाता है और विद्यालय तथा स्थानीय परिवेश या इसके किसी भाग का रेखा चित्र बनाता है।
- 2. मानचित्र अथवा रेखा-मानचित्र में दिशाएँ पहचानता है।
- 3. राज्य के मानचित्र में जिलों और भारत के मानचित्र में राज्यों को दर्शाता है।
- 4. जिल के प्रमुख भौगोलिक विशेषताओं जलवायु, उपज, फसलों और उद्योगों, के विषय में जानता है।
- 5. जिले के मानचित्र को कागज पर उतारता है तथा उसमें भौगोलिक विशेषताओं, प्रमुख स्थानों और मार्गों को दर्शाता है।
- 6. जिले के लोगों के जीवन का वर्णन करता है।

#### हमारा प्रदेश/केन्द्र शासित प्रदेश एवं हमारा देश:-

- 1. भारत के विभिन्न प्रदेशों (राज्यों) एवं केन्द्र शासित प्रदेशों के नाम तथा उनकी स्थिति जानता है।
- 2. अपने प्रदेश/केन्द्र शासित प्रदेश की स्थिति का पडोसी प्रदेशों, अन्तर्राष्ट्रीय सीमा रेखा, समुद्र-तट (जो भी लागू हो) के संदर्भ में पता लगाता है।
- 3. प्रदेश की प्रमुख भोगौलिक विशेषताओं तथा जलवायु सम्बन्धी दशाओं का वर्णन करता है।
- 4. राज्य के प्रमुख प्राकृतिक संसाधनों के वितरण तथा देश के लिए उनकी उपयोगिता जानता है।
- 5. प्रमुख फसलों के वितरण (जलवायु और मैदान के परिपेक्ष्य में) तथा प्रमुख व्यवसायों और औद्योगिक स्थानों के विषय में जानता है।
- 6. राज्य के विशिष्ट लोगों के जीवन के विषय में वर्णन करता है
- 7. अपने प्रदेश के प्रमुख स्थानो और मार्गो के महत्व को तथा वे कहाँ-कहाँ स्थित हैं, इसे जानता है।
- 8. मानचित्रों की पुस्तक(एटलस) का प्रयोग जानता है।
- 9. विभिन्न भागों को दर्शाने के लिए उचित संकेतों का प्रयोग करते हुए नक्शे का काम करता है। हमारा देश और विश्व :-
  - 1. ग्लोब पर प्रमुख स्थलीय, जलीय भूभाग, ध्रुव-प्रदेश एवं भूमध्य रेखा पहचानता है।
  - 2. एशिया में भारत को तथा हिन्द महासागर एवं अन्य पडोसी देशों के सन्दर्भ में उसकी स्थिति को दर्शाता है।
  - 3. मानचित्र में कौन-कौन सी प्रमुख भौगोलिक विशेषताएँ कहाँ-कहाँ है, उन्हें पहचानता है और उनका वर्णन करता है।
  - 4. भारत की जलवायु की प्रमुख विशेषताओं का वर्णन करता है।
  - 5. भारत के प्रमुख प्राकृतिक संसाधनों का पता लगाता है और उनका वर्ण करता है।
  - 6. भारत की प्रमुख फसलें कहाँ-कहाँ होती हैं, इसे समझता है।
  - 7. भारत के प्रमुख स्थानों एवं मार्गों के महत्व को और वे कहाँ-कहाँ स्थित हैं, इसे जानता है।
  - 8. भारत के विभिन्न प्रमुख स्थानों के जन-जीवन का वर्णन करता है ।
  - 9. भारत के आयात व निर्यात की प्रमुख सामग्री के विषय में जानता है। साथ ही भारत को पडोसी देशों तथा संसार के दूसरे प्रमुख देशों से जोडने वाले मुख्य स्थलीय, जलीय और वायु मार्गों के विषय में जानता हैं।

# मानव के अतीत एवं वर्तमान में सम्बन्ध देखता है और अतीत को सही परिप्रेक्ष्य में समझता है।:-स्थानीय त्योहार:-

- 1. स्थानीय मेलों एव त्योहारो से जुडी परम्पराओं, सरल तथ्यो को जानता है।
- 2.मनाए गए त्योहारो और देखे गए मेलो से जुडे अनुभवों का अपने संगी-साथियों के साथ आदान-प्रदान करता है।

### राष्ट्रीय त्योहार एवं अन्य समारोहः-

- 1. राष्ट्रीय त्योहारो का महत्व जानता है।
- 2. राष्ट्रीय त्योहारों एवं अन्य समारोहों में भाग लेता है तथा इन दोनों के आयोजनों में समानता तथा असमानता को समझता है।
- 3. राष्ट्रीय ध्वज के विषय में जानता है।
- 4. राष्ट्रगान गाता है।

### हमारे आदि-पूर्वजः-

- 1. आदि-मानव के जीवन का वर्णन करता है।
- 2. आदि-मानव का जीवन हमारे जीवन से क्यो भिन्न है, इसका कारण समझता है।
- 3. आदि-मानव की जीवन-शैली तथा वे परिस्थितियाँ जिनमें वह रहता था, इसके विषय में समझता है।
- 4. आज से पाँच हजार वर्ष पहले भारत के कुछ प्रमुख भागों में रहने वाले लोगों के जीवन के सरल तथ्यों को जानता है।

### आदि-काल से वर्तमान-युग तक का मानव-विकास:-

- 1. मनुष्य के द्वारा औजारों एवं तकनीक की क्रमिक उन्नति को समझता है।
- 2. इस प्रकार की उन्नति एवं सभ्यता के विकास में सम्बन्ध देखता है।
- 3. आधुनिक विकास में विज्ञान एवं प्रौद्योगिकी के योगदान की सराहना करता है।
- 4. संगीत, कला एवं स्थापत्य-कला जैसे- सांस्कृतिक जीवन के प्रमुख पक्षों को जानता है तथा मनुष्य के स्ख के लिए उनका महत्व समझता है।

#### हमारा खतंत्रता-संग्रामः-

- 1. इस तथ्य को जानता है कि जब अंग्रेजों ने बाहर (इंग्लैंड) से आकर हम पर शासन करना प्रारम्भ किया तब हमने अपनी स्वतंत्रता कैसे खोई और किस प्रकार हमने अपनी स्वतंत्रता पुनः प्राप्त की।
- 2. देश के विभिन्न भागों के लोगों ने स्वतंत्रता-संग्राम में भाग लिया इस तथ्य को महसूस करता है।
- 3. स्वतंत्रता-संग्राम में गॉधीजी तथा अन्य लोगों के योगदान की सराहना करता है।
- 4. देश की स्वतंत्रता अमूल्य है और हम सबको इसकी रक्षा हर कीमत पर करनी चाहिए, यह निष्कर्ष निकालता है।

सामान्य लेकिन सरल और आसानी से दिखाई देने वाली सामाजिक आर्थिक परिस्थितियों और समस्याओं को समझता है तथा उनका विश्लेषण करता है और अपनी अनुभव के स्तर पर उनका सम्भावित हल खोजता है। छोटा परिवार सुखी परिवार:-

- 1. छोटे घरों में रहने वाले बड़े परिवारों की कठिनाइयों का अवलोकन करता है।
- 2. अस्पतालों, रेलों और बसो आदि में अधिक भीड-भाड का अवलोकन करता है।
- 3. आस-पास के बुजुर्गों से बातचीत करके आज की भीड-भाड वाली स्थिति की पहले के दिनों की स्थिति से तुलना करता है।

#### राष्ट्रीय एकता:-

- 1. अपनी स्वतंत्रता की रक्षा एवं उन्नति के लिए राष्ट्रीय एकता की आवश्यकता की सराना करता है।
- 2. हमारे देश के संसाधनों, परिवेश एवं लोगों के जीवन की विविधता हमारी एकता को कैसे समृद्ध बनाती है, इसे समझता है।
- 3. भारत की संस्कृति के मुख्य तथ्यों एवं विभिन्न क्षेत्रों द्वारा देश की समृद्धि में योगदान के विषय में जानता है।
- 4. अपने राष्ट्रीय प्रतीकों के प्रमुख तथ्यों को जानता है और उनके महत्व को समझता है। तेजी से बदलते विश्व में हमारा विकास:-
  - 1. आज के विश्व में यातायात, संचार, आयुर्विज्ञान आदि में तेजी से होने वाले विकास को जानता है। साथ ही यह भी जानता है कि हमारे देश को इस विकास के साथ-साथ चलने की आवश्यकता है।
  - 2. शीघ्र विकास के लिए देश के सभी क्षेत्रों के लोगों में शान्ति, कठिन परिश्रम एवं सहयोग की आवश्यकता महसूस करता है।
  - 3. तेजी से बढ़ती हुई जनसंख्या देश के विकास में एक गम्भीर बाधा है, इसे समझता है।
  - 4. प्रत्येक दशक में होने वाली जनगगना के विषय में जानता है।
  - 5 स्वतंत्रता के पश्चात प्रत्येक जनगणना के अनुसार जनसंख्या में वृद्धि ज्ञात करता है और इस वृद्धि से होने वाले परिणामों को समझता है।

उन कारकों को समझता है जो अच्छे स्वास्थ्य को बनाए रखने में सहायक होते हैं:-

### शरीर के विभिन्न भागों के कार्य एवं उनकी सुरक्षा:-

- 1. मानव शरीर के प्रमुख कार्यों, जैसे- पाचन, श्वसन, रक्त संचरण आदि को समझता है।
- 2. शरीर के अंगों जैसे ऑखों, बालों और दॉतों की सही देखभाल करना जानता है।

# पोषण, प्रदूषण एवं स्वच्छताः-

- 1. पोषकता के आधार पर आहार-सामग्री का वर्गीकरण करता है तथा संतुलित आहार की आवश्यकता समझता है।
- 2. आहार और पेय जल कैसें प्रदूषित होते हैं, इसे जानता है।
- 3. पेय जल को शुद्ध करने के लिए सरल प्रयोग करता है।
- 4. अस्वच्छ दशाओं और बीमारियों के फैलने के बीच सम्बन्ध बनाता है।

### रोगों की रोकथाम एवं स्वस्थ्य रहना:-

- 1.रोगों क प्रमुख कारणों को जानता है।
- 2. संचारी रोगों की रोकथाम के लिए टीकों की उपयोगिता समझता है।
- 3. कूडा-करकट इकटठा करने व उसके निरूपण के उपाय सुझाता है।
- 4. प्राथमिक चिकित्सा की सरल कुशलताओं का प्रयोग करता है।
- 5. शरीर का तापमान जानने के लिए धर्मामीटर का प्रयोग करता है।
- 6. दस्त आदि रोगों से ग्रसत शिशुओं की जीवन रक्षा के लिए उस कार्यक्रम में भाग लेता है जहाँ यह ज्ञान बच्चे एक दूसरे से प्राप्त करते है।

# अपने परिवेश की सजीव वस्तुओं के विषय में जानकारी प्राप्त करता है, उसका वर्गीकरण करता है तथा सरल निष्कर्ष निकालता है।

### सजीव वस्तुएँ, उनकी विशेषताएँ तथा उनका वर्गीकरणः-

- 1. अपने निकट परिवेश में अवलोकन करके वस्तुओं को निम्नांकित श्रेणियों में वर्गीकृत करता है:
  - क. सजीव एवं निर्जीव,
  - ख. प्राकृतिक एवं मानव-निर्मित
- 2. पशुओं एवं पेड-पौधों में समानता और भिन्नता को समझता है।
- 3. पौधे के प्रमुख भागों को पहचानता है।
- 4. पौधों को उनके आकार, जीवन-काल एव ऋतु के आधार पर वर्गीकृत करता है।
- 5. विभिन्न पशुओं एवं पक्षियों की आहार सम्बन्धी आदतों का अवलोकन करता है। सजीव वस्त्रॅं, मनुष्य के लिए उनकी उपयोगिता:-
  - 1. पेड-पौधो एवं पशुओं का उपयोग करने के कुछ प्रमुख तरीकों को पहचानता है।
  - 2. कुछ हानिकारक कीट-पतंग एवं खर-पतवार पहचानता है।
  - 3. पशुओं एवं पेड पौघों की सुरक्षा एव देखभाल की आवश्यकता को समझता है तथा इन्हें करने के कुछ सरल तरीको का वर्णन करता है।
  - 4. राष्ट्रीय पक्षी, पशु एवं फूल का नाम बताता है।
- 5. स्थानीय वृक्षारोपण कार्यक्रम में भाग लेता है तथा उसके महत्व की सराहना करता है। सजीव वस्तुएँ एवं परिवेश:-
  - 1. पशु और पेड-पौधे स्वय को परिवेश के अनुकूल ढाल लेते है, इसके उदाहरण देता है।
  - 2. घटते हुए वन, भूमि के अपक्षय और प्रदूषण से वर्तमान एव संभावित भविष्य में पड़ने वाले हानिकारक प्रभाव की कल्पना करता है।
  - 3. कुछ ऐसी वर्तमान योजनाओं को जानता है, जैसे- वनों का विकास और उनमें सुधार नदी/नालों/ तालाबों की सफाई।

### निर्जीव वस्तुओं की कुछ सामान्य विशेषताओं की प्रेक्षण एवं जाँच करता है।

### साधारण पदार्थ व उनके लक्षण/गुण:-

- 1. सरलता से अवलोकित होने वाले गुणों जैसे- रंग,रचना, कठोरता के आधार पर साधारण पदार्थों को पहचानता है।
- 2. अपरोक्त गुणो के आधार पर पदार्थों का नर्गीकरण करता है।

### पदार्थ एवं उसके गुण:-

- 1. पदार्थ की तीनों अवस्थाएँ, ठोस,द्रव एवं गैस जानता है।
- 2. पानी के संदर्भ में पदार्थ की तीनों अवस्थाओं का अवलोकन करता है।
- 3. इन तीनो अवस्थाओं की अन्तर- परिवर्तनशीलता का सामान्यीकरण करता है। उर्जा एवं कार्यः-
  - 1.दैनिक जीवन में प्रयोग किए जाने वाले उर्जा के प्रमुख स्रोत जानता है।
  - 2. उर्जा, कार्य मे किस प्रकार सहायता करती है, इस तथ्य को समझता है।

# पृथ्वी और आकाश पर होने वाली सरल घटनाओं का अवलोकन करता है तथा निष्कर्ष निकालता है।

# पृथ्वी और सूर्य: पृथ्वी और आकाश मनुष्य, विज्ञान एवं परिवेश

- 1. अपने दैनिक जीवन में विज्ञान के महत्व की सराहना करता है
- 2. विज्ञान की कुछ महत्वपूर्ण उपलब्धियों (खोज और आविष्कार )का वर्णन करता है।
- 3. वैज्ञानिक ज्ञान के दुरूपयोग के ख़तरों जैसे युद्ध के विषय में जानता है।
- 4. प्राकृतिक संसाधनों जैसे- मिटटी, खनिज, पानी एवं वन और परिवेश का वैज्ञानिक ढंग से उपयोग करने की आवश्यकता महसूस करता है।

# पृथ्वी और सूर्य का आपसी सम्बन्ध तथा उसके परिणाम:-

- 1. पृथ्वी की आकृति का (चित्रों के आधार पर) वर्णन करता है।
- 2. पृथ्वी के घूमने (घूर्णन/परिभ्रमण) का दिन/रात होने के बीच सम्बन्ध बताता है।
- 3. वर्ष भर मे दिन के प्रकाश की अवधि में अन्तर का प्रेक्षण करता है।
- 4. ऋतुओं के होने का सामान्यीकरण करता है।
- 5. ऋतुओं के होने के परिणामों का अवलोकर करता है।

#### आकाशीय पिण्ड:-

- 1. सूर्य, पृथ्वी एवं चन्द्रमा में अन्तर जानता है।
- 2. ध्रुवतारा एवं सप्तृर्षि को पहचानता है तथा रात के समय दिशा-ज्ञान के लिए इनका उपयोग करता है।
- 3. चन्द्रमा की कलाओं का अवलोकन करता है।

### मौसम चक्र:-

- 1. वायु एवं मौसम का सम्बन्ध जानता है।
- 2. मौसम को प्रभावित करने वाले पानी के विभिन्न रूप यथा- आर्दृता,कोहरा, बर्फ आदि के विषय में जानता है।
- 3. मौसम के विभिन्न रूपों का प्रेक्षण करता है तथा पिक्टोग्राफ (चित्रलिपि)की सहायता से उन्हे अंकित करता है।

# हमारे जीवन में वायु:-

- 1. वायु की उपयोगिता समझता है।
- 2. वाय-प्रदूषण के कारण जानता है।

### हमारे जीवन में जल:-

- 1. जल के विभिन्न उपयोगों का वर्णन करता है।
- 2. जल के विभिन्न स्रोतों को जानता है।
- 3. अपने आस-पास जल के विभिन्न स्रोतों का पता लगाता है।
- 4. जल-प्रदूषण के कारण ज्ञात करता है।

### हमारे जीवन में मिटटी का महत्व:-

- 1. मिट्टी की उपयोगिता जानता है।
- 2. मिट्टी के कणों के आकार एवं उपजाउपन के आधार पर अपने आस-पास की मिट्टी का वर्गीकरण करता है।
- 3. मिट्टी को उपजाउ बनाए रखने के उपाय ज्ञात करता है।
- 4. मिट्टी को कटाव (अवक्षय) से बचाने की आवश्यकता समझता है।

#### APPENDIX-3

#### STATUS OF NON-GOVERNMENT ORGANIZATION

1. Name and Address of the Non-Government Organization (NGO) with pin code:

VANVASI SEVA KENDRA.

AT-P.O. ADHAURA:

DISTT.-KAIMUR (BHABUA), BIHAR,

PIN CODE - 821116.

2. Registration No. with date of registration 49/10.3.1969.

- 3. Year when NFE programme was started JULY, 1989
- 4. Number of blocks/mandals/projects covered ONE BLOCK
- 5. Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary	-	5	85	90
Upper Primary	-	-	10	10

6. Total number of learners of Centres being run by the NGO

Stage ·	Boys	Girls	Total
Primary	1290	960	2250
Upper Primary	187	63	250

7. Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGOs.

Teaching and learning is based on NCERT Pattern and the Material produced by under mentioned organizations are being used: (i) S.R.C., Patna (ii) Sansarg, Patna (iii) Deepayatan.

8. Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	85	05	90
Upper Primary	20	-	20

9. Minimum educational qualifications of instructors/teachers

Stage		Minimum Educational Qualifications						
Primary	Non Educa	Non Matriculation Level (minimum up to Xth Class Education)/Matriculation.						
Upper Primary	Intern	nediate/Graduati	on.	~				

10 Training status of NFE instructor/teacher

Stage	Number of days of pre- service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	12 days	30 days	Motivational Workshop of 3-4 days duration.
Upper Primary	- do -	- do -	do -

11. Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)
Primary	District Jan Shiksha and Bihar Education Project on
Upper	Mental/moral/educational/cultural/environment based.
Primary	

12 How many NFE learners were declared passed?

Year	Year Primary Stage		Upper Primary Stage	
	Total No of	Number passed	Total No of	Number passed
	Learners		Learners	
1997	2250	1222	250	167
1998	2250	1245	250	188
1999	2250	1309	250	176

13. Who certifies achievement of NFE learners?

Stage	Certifies					
Primary	Supervisor and subsequently by the Coordinator					
Upper Primary	Coordinator and subsequently by an Educationist being authorised by the organization.					

- 14. Is the certificate recognized by the Govt./State Board? State Government
- Any other special feature of NGO.( I) Balwadis -30 Centres.( ii ) Programmes related to organize youths for awareness and development of leadership qualities by way of sports and cultural activities (iii) KVK (I C.A R.) (iv) Leprosy Eradication Programme. (v) Khadi and Village Industries (vi) Leather Training Processing Unit. (vii) Fruits & Veg. Processing Unit. (viii) Seeds Processing Centre

Submitted by . Sd/Arun Kumar
Education Coordinator

#### APPENDIX-3

#### STATUS OF NON-GOVERNMENT ORGANISATION

- 1. Name and Address of the Non-Government Organization (NGO) with pin code: Ghoghardiha Prakhand Swarajya Vikas Sangh, AT. & P.O Jagatpur, Via-Ghoghardiha, District-Madhubani, Bihar, Pin-847402
- 2 Registration No with date of registration-- No 78/1978-79 Date 11.7.1978.
- 3. Year when NFE programme was started 1 12 89 (100) +21 1 1996 (100)+ 1.12 99 (100) At Present 280 Primary + 20 (U Primary) 300 Centre
- 4. Number of blocks/mandals/projects covered Three Blocks

5 Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary	35	28	217	280
Upper Primary	-	19	1	20

6 Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	4088	2912	7000
Upper Primary	5	495	500

- 7 Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO?
  - 1. S.R.C., Bihar, Patna.
  - 2. B.S.T B.C. Ltd., Bihar, Patna.
  - 3. G.P.S V.S., Jagatpur, Madhubani.

Total 4. Other - Suplimentary Book from different Publication

8. number of NFE instructors/teachers appointed by the NGO

Stage		Female Instructors	Total
Primary	212	68	280
Upper Primary	24	16	40

9. Minimum educational qualifications of instructors/teachers

Stage	Minimum Educational Qualifications
Primary	Matric
Upper Primary	I A.

Training status of NFE instructor/teacher

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	12	18	
Upper Primary	12	18	8 days

Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)		
Primary	First Year - 12+10+8 days		
Upper Primary	2 <sup>nd</sup> Year - 12+8 days		

12. How many NFE learners were declared passed?

Year	Primary Stage		Upper Primary Stage	
	Total No. of Learners	Number passed	Total No. of Learners	Number passed
1997	5000 learners	3446	-	· •
1998	5000 learners	1026	-	
1999	7000 learners	3268	500	-

13. Who certifies achievement of NFE learners?

Stage	Certifies
Primary	Member of Evaluation Team(P.O. A.P.O. Instructor)
Upper Primary	Supervisor &VEC members & other staffs of the organization.

- 14. Is the certificate recognized by the Govt./State Board? No
- Any other special feature of NGO: Any important decision regarding better implementation of the programme are taking with the help of Gram Sabha & Mahila Mandal. We are taking a certificate from the primary & middle school after admit the NFE learners. Different types of mass-media involvement campaign, special programmes on National Days Organised by the organization.

Submitted by:

Signature Sd/-

Ramesh Kumar Secretary

Date.

### **APPENDIX-3**

### STATUS OF NON-GOVERNMENT ORGANIZATION

- 1. Name and Address of the Non-Government Organization (NGO) with pin code Magadh Vikas lok, AT & P O. Kosut, Via Masaudhi, Distt. Patna (Bihar).
- 2. Registration No. with date of registration. No. 209 dated 17.6.91
- 3. Year when NFE programme was started. 1.10.96.
- 4 Number of blocks/mandals/projects covered Dhosarua (1)

5. Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary	-		25	25
Upper Primary	-		-	-

6. Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary			
Upper Primary			

7 Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO?

Bihar Anop Charic Shiksa Sadhan Kendra (D.R.U)

8. Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	21	4	25
Upper Primary			

9. Minimum educational qualifications of instructors/teachers

Stage	Minimum Educational Qualifications		
Primary	matriculation		
Upper Primary			

10 Training status of NFE instructor/teacher

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	First Year-30 days	II & III Years 20 days	
Upper Primary			

11. Which training package(s), if any, is/are being used for training for Instructors/Teachers

Stage	Name(s) of training package(s)		
Primary	N.R		
Upper Primary	P.P.		

12. How many NFE learners were declared passed?

Year	Primary Stage		Upper Pr	imary Stage
	Total No. of	Number passed	Total No. of	Number passed
	Learners		Learners	
1997			~	-
1998	625	138	-	-
1999	623	56		-

13. Who certifies achievement of NFE learners?

Stage	Certifies
Primary	Organization himself
Upper Primary	

- 14. Is the certificate recognized by the Govt /State Board? No
- 15. Any other special feature of NGO: M.C.H., S.F. Agriculture Education, Vocational Education, Women Welfare, Child Welfare etc.

Submitted by:

Signature Sd/-Name Harendar

#### APPENDIX-3

### STATUS OF NON-GOVERNMENT ORGANIZATION

- Name and Address of the Non-Government Organization (NGO) with pin code: Gram Swarajya Samiti Bakhtiyarpur, At P.O. – Saltimpur Via – Khushrupur, District – Patna (Bihar) Pin – 803202.
- 2. Registration No. With date of registration 159/77 78 23 March 1978
- 3. Year when NFE programme was started 1989.
- 4. Number of blocks/mandals/projects covered Only one Block i.e Bokhtiyarpur.

5. Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary	2	17	81	100
Upper Primary				

6. Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	1284	1219	2503
Upper Primary			

7. Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO? Instructor guide book, supervisor Guide book, primer produced by organization itself (Padho-Likho Bhag I & 2). Course of study (M.L.L.by Jan Shiksha nideshalaya). Slate,, Pencil, small Book related to environment, Science story of great man) Map Chart. Board Ball Jampindrope ring etc.

8. Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	70	30	100
Upper Primary			

9. Minimum educational qualifications of instructors/teachers

Stage	Minimum Educational Qualifications
Primary	Matriculate
Upper Primary	

10 Training status of NFE instructor/teacher

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training	
Primary	Thirty days	Twenty days	Refresher Course is conducted in mean time.	
Upper Primary				

11. Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)
Primary	District Resource Unit Samanvya Ashram, Bodhgaya (Bihar)
Upper Primary	

12 How many NFE learners were declared passed?

Year	Primary Stage		Upper Primary Stage	
	Total No. of Learners	Number passed	Total No. of Learners	Number passed
1997	2830	1615		
1998	2500	1568		
1999	2503	2354		

13. Who certifies achievement of NFE learners?

Stage	Certifies
Primary	Organization itself on evaluation basis and time to time on evaluation format given by Jan Shiksha Nideshalaya (Bihar Government)
Upper Primary	

- 14. Is the certificate recognized by the Govt./State Board? :- Yes
  Every year our successful learners are admitted in Govt formal Schools. So this is
  the recognition of State Government.
- Any other special feature of NGO Organization has formed self-help groups among the guardians of learners who are got benefited by organization as agricultural team and small scale self employment schemes. Thus Children of NFE Projects have availability of good education and letter living standard. Organization have continuous contact to each guardians of learners.

Submitted by S/d
Name Prakash kumar

Date.

### APPENDIX-3

### STATUS OF NON-GOVERNMENT ORGANIZATION

- Name and Address of the Non-Government Organization (NGO) with pin code:

  "Bhagyan Pustkalya" Naya Bazar, Bhagalpur -812002 (Bihar)
- 2 Registration No. with date of registration 35/18<sup>th</sup> December 1965,

3 Year when NFE programme was started:-

Ist October, 1996

4 Number of blocks/mandals/projects covered :-

One Block

5 Total number of NFE Centres being run by the NGO Fifty

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary	0	0	50	50
Upper Primary				

6 Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	800	678	1478
Upper Primary			

7 Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO? Anopcharik Shiksha Sadhan Kendra, Patna.(S.R.C.)

8 Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	29	29	50
Upper Primary			

Minimum educational qualifications of instructors/teachers

Stage	Minimum Educational Qualifications
Primary	Eight Class Pass
Upper Primary	

10 Training status of NFE instructor/teacher

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	1" Year 20 days	2 <sup>nd</sup> Year 20 days	
Upper Primary		W-0	

Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)	
Primary	Social Education, Mass Literacy and Library Science.	
Upper Primary		

12. How many NFE learners were declared passed?

Year	Primary Stage		Upper Primary Stage_	
	Total No. of Learners	Number passed	Total No. of Learners	Number passed
1997	1195	745		
1998	1478	1112		
1999	1478	1398		

13. Who certifies achievement of NFE learners?

Stage	Certifies		
Primary	Pt U.N.J. Institute of Library Science, Bhagwan Pustakalaya, Naya Bazar, Bhagalpur - 2 (Bihar)		
Upper Primary			

- Is the certificate recognized by the Govt /State Board?

  Pre recognized by state Govt. of Bihar and certified by Raja Ram Mohan Roy Library Foundation, Calcutta Dept of culture Govt. of India.
- 15. Any other special feature of NGO
  - (1) Divisional Public Library, Bhagalpur (Bihar)
  - (2) Institute of Library Science & Social Education in the Division
  - (3) Promotion and Propgation work of Hindi Language & Literature
  - (4) Publication & Research work of old Manuscripts

	Submitted by	
Date	Signature	Sd/-
		Anand Kumar Jha

# STATUS OF NON-GOVERNMENT ORGANIZATION

- 1. Name and Address of the Non-Government Organization (NGO) with pin code Kamleshwary Antyedya Asharam, P.O. Salampur, Via Pandoul, District Madhubani, Bihar.
- 2 .Registration No. with date of registration "15". Dated 14 April, 1982.
- 3 Year when NFE programme was started August, 1994.
- 4. Number of blocks/mandals/projects covered Pandoul

5. Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary			25	25
Upper Primary				

6. Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	376	249	625
Upper Primary			

7. Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO? S.R.C. Bihar

8. Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	18	7	25
Upper Primary			

Stage	Minimum Educational Qualifications
Primary	Matric
Upper Primary	

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	12 days	20 days	
Upper Primary			

Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)
Primary	S.R.C. Bihar
Upper Primary	

12 How many NFE learners were declared passed?

Year	Primar	y Stage	Upper F	rimary Stage
	Total No. of	Number passed	Total No. of	Number passed
	Learners		Learners	
1997	625	178		
1998	625	105		7-
1999	101	est top		·-

Stage	Certifies	
Primary	Project team	
Upper primary		

- 14. Is the certificate recognized by the Govt /State Board? N.R.
- 15 Any other special feature of NGO Environment + Programme, Health Education, Plantation

	Submitted by:	Sd/-	
Date	 Signature	arga	
	Name Ume		

### STATUS OF NON-GOVERNMENT ORGANIZATION

.Name and Address of the Non-Government Organization (NGO) with pin code.

LOK PRABHAT, Postmortam Road Nawada – 805110 (Bihar)

Registration No with date of registration 127/92-93 19/5/1992.

Year when NFE programme was started 1/10/1996

Number of blocks/mandals/projects covered One

Total number of NFE Centres being run by the NGO - 25

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary	*	2	23	25
Upper Primary	*	*	*	*

Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	385	286	671
Upper Primary			

Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO?

S C E.R.T

- (I) Padhe Badhe Bhag 1 to 4.
- (ii) Ganit Bodh Bhag 1 to 2.
- (iii) Anudeshika Sandarshika Prashikshan Sandarshika

Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	3	22	25
Upper Primary	*	*	*

Stage	Minimum Educational Qualifications
Primary	Matric
Upper Primary	

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	12 day's	20 day	**
Upper Primary	*	*	*

Which training package(s), if any, is/are being used for training for

Instructors/teachers?

Stage	Name(s) of training package(s)
Primary	Letters number card, Games, Song and others
Upper Primary	

12. How many NFE learners were declared passed?

Year	Primary Stage		Upper Primary Stage	
	Total No. of Learners	Number passed	Total No. of Learners	Number passed
1997	681	*	*	*
1998	681	172	*	*
1999	671	212	*	*

Who certifies achievement of NFE learners?

Stage	Certifies
Primary	Self by NGO/DRU Hazaribagh
Upper Primary	

- 14. Is the certificate recognized by the Govt /State Board? \*
- 15. Any other special feature of NGO

Upper Primary Centre

Water Shed Development-Programme, S.H.G., Rural Development Programme Run by the NGO...

	Submitted by .	Sd\-	
Date <sup>.</sup>	Signature		
	Name Vijav K	umar Sing	_

# STATUS OF NON-GOVERNMENT ORGANISATION

- Name and Address of the Non-Government Organization (NGO) with pin code: MAHAVIR SING MEMORIAL TRUST, AT-BISHANPUR-P.O.-BAIKA-BISHANPUR, VIA-GHOGHADIHA, DISTRIDCT MADHUBANI, BIHAR 847402.
- 2 Registration No. with date of registration-- 1743, dated 17.02 93.
- 3. Year when NFE programme was started. April, 1997.
- 4. Number of blocks/mandals/projects covered Two (Phularas & Ghoghardiha)

5. Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary	Nil	Nil	25	25
Upper Primary				

6. Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	355	282	637
Upper Primary			

7. Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO?: JANSHIKSHA NIDESHALAYA, BIHAR, PATNA

8. Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	18	7	25
Upper Primary		,	

Stage	Minimum Educational Qualifications
Primary	Matriculatation
Upper Primary	

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary		20 days	
Upper Primary			

11. Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)
Primary	Package prepared by Jan Shiksha Nideshalaya – Bihar.
Upper Primary	

12. How many NFE learners were declared passed?

Year	Primar	y Stage	Upper Primary Stage		
	Total No. of Learners	Number passed	Total No of Learners	Number passed	
1997	N.R.				
1998	N.R.				
1999	637	253			

Stage	Certifies
Primary	P.O. & Secretary
Upper Primary	N.A

- 14. Is the certificate recognized by the Govt./State Board? .- State Board
- Any other special feature of NGO: Works in the field of (i) Panchayat Raj. (ii) Environment (iii) Family Planning (iv) Aged People.

	Submitted by	
Date <sup>.</sup>	Signature_S/d	
	Name Kamal Prasad Kwar	

## STATUS OF NON-GOVERNMENT ORGANIZATION

- Name and Address of the Non-Government Organization (NGO) with pin code. SISHU NARI KALA PRASHIKSHAN SANSTHAN, VILLAGE & P.O.-JALALPUR, VIA-BAGHRA, DIST.-SAMASTIPUR (BIHAR).
- 2 Registration No. with date of registration No. -172, Date -24.05.1986.
- 3 Year when NFE programme was started 05.08.1996.
- 4 .Number of blocks/mandals/projects covered One Block.

5 .Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary	Nil	Nil	Twenty Five(25)	25
Upper Primary				

6 Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	342	287	629
Upper Primary	No. bo.	••	

Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO?
 Teaching and Learning Materials provided by State Resource Centre, Bihar, Patna, used by NGO

8 .Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	Thirteen (13)	Twelve (12)	Twenty Five (25
Upper Primary			

Stage	Minimum Educational Qualifications
Primary	Matriculate
Upper Primary	А-

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	12 day's	18 day's	. 32 day's
Upper Primary	<u></u>		

Which training package(s), if any, 1s/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)							
Primary	Abasiya Choparan,	•	given	by	Nav	Bharat-Jagriti	Kendra,	Hazaribagh
Upper Primary								

12. How many NFE learners were declared passed?

Year	Prima	ry Stage	Upper Primary Stage		
	Total No of Learners	Number passed	Total No of Learners	Number passed	
1997	554	Nil			
1998	554	Nil			
1999	629	334			

13. Who certifies achievement of NFE learners?

Stage	Certifies
Primary	Head Master, Teacher of Jalalpur, Upper Primary Schoolk donw with - secretary NGO.
Upper Primary	

- 14. Is the certificate recognized by the Govt./State Board?
- 15. Any other special feature of NGO

At present Institution running NFF assisted by HRD education, New Delhi, govt. Centre assisted by Ministry of-Welfare-New Delhi and Construction of Low cost, Assisted by CAPART, New Delhi Also Sports, youth-festival and cultural programme organized buy institution every year.

	Submitted by	Sd-	
Date <sup>-</sup>	Signature_		
	Name Baijnath	P. Rov	

#### STATUS OF NON-GOVERNMENT ORGANISATION

- Name and Address of the Non-Government Organization (NGO) with pin code: Swablambam Shiksha Kendra, M2/30, Shri Krishna Puri, Patna – 800001.
- 2. Registration No. With date of registration 193 Year 1981 82 till date by 17 9 1981
- 3. Year when NFE programme was started . 01.04.1994.
- 4. Number of blocks/mandals/projects covered .- 3 Block

5. Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary	2	18	5	25
Upper Primary				

6 Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary _	221	408	629
Upper Primary			

7 Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO?— Teaching Learning materials is used prepared by Education Department Govt of Bihar.

8 Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	4	21	25
Upper Primary			••

Stage	Minimum Educational Qualifications	
Primary	Matriculation to B.A.	
Upper Primary		

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	12 days	10 days	Yes, Vocational Training, Self help Group.
Upper Primary			

11. Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)	
Primary	Govt. Training Package supplied by D.R.U	
Upper Primary		

12. How many NFE learners were declared passed?

Year	Primary Stage		Upper Primary Stage	
	Total No. of Learners	Number passed	Total No. of Learners	Number passed
1997	629	100		
1998	729	260		
1999	929	285		No. and

Stage	Certificate	
Primary	Supervisor & P.O.	
Upper Primary		

- 14. Is the certificate recognized by the Govt./State Board? --- Not response
- Any other special feature of NGO—Organization Yes, this NGO is a Women Organization. It is thrust ones is fighting violence Against Women. This Organization publish Women Journal since ten years, named "Jago Bahan"...

	Submitted by	-
Date	Signature	S/d
	Name	President

# Appendix 3 STATUS OF NON-GOVERNMENT ORGANIZATION

- Name and Address of the Non-Government Organization (NGO) with pin code Head Office Tagoore Society for Rural Development. 46, B. Arabinda Asaram, Calcutta 5 (West Bengal), Project Office Tagore Society for Rural Development. Maheshpur, Project, At+OP.O. Maheshpur Raj, District Pakur. (Bihar) Pin 816106.
- 2 .Registration No. with date of registration 5/9928 of 1969 70.
- 3 .Year when NFE programme was started October 1996.
- 4 .Number of blocks/mandals/projects covered Under 1 Block 48 Villages

5. Total number of NFE Centres being run by the NGO 50

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary			50	50
Upper Primary				

6. Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	771	745	1516
Upper Primary			

7 Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO?

State Resource Centre Patna(Bihar)

State Resource Centre (West Bengal)

Ram Krishna Misson Lok Shiksha Parishad(West Bengal).

8 .Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	33	17	50
Upper Primary			

Stage	Minimum Educational Qualifications		
Primary	Matric(in some cases for S.C., S.T., & Female, Class VIII		
Upper Primary			

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	3day's organizations on NGOs work	NGO 21 days	Organisation -3 days awareness-2 days Health -2 days
Upper Primary			' <b></b>

11. Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)		
Primary	Govt. and TSRD, training package are being used		
Upper Primary			

12. How many NFE learners were declared passed?

Year Primary Stage		Stage	Upper Prima	ary Stage	
	Total No. of Learners	Number passed	Total No. of Learners	Number passed	
1997	1494	630			
1998	1529	662			
1999	1516	820	W-		

Stage	Certifies	
Primary	P.O and TSRD evaluation team.	
Upper Primary		

- 14. Is the certificate recognized by the Govt./State Board? ..... Not Response
- Any other special feature of NGO—Organization Swalamban Samiti, Mahila Samiti awareness on village problem. Health services, IGP- Agriculture, Irrigation, Animal husbandry.

	Submitted by
Date:	Signature S/d
	Name Kanchan Kumar Ghosh.

## STATUS OF NON-GOVERNMENT ORGANISATION

- Name and Address of the Non-Government Organization (NGO) with pin code.
   "LOKASEWAYATAN" AT & P.O. –NIMDIH, DIST SINGHBHUM WEST PIN 832401 (BIHAR)
- 2. Registration No. With date of registration: 24 of 1952-53.
- 3 Year when NFE programme was started. :- 1996
- 4 Number of blocks/mandals/projects covered :- One Block

5. Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary			100	100
Upper Primary	-			

6 Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	1429	1188	2617
Upper Primary	••		

7. Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO?--- S.R.C. Patna, Lok Shiksha Parishad, Narendra Pur, Own publication authenticated by S R C

8 Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	. 69	31	100
Upper Primary	***	~-	

Stage	- Minimum Educational Qualifications		
Primary	Matric and above		
Upper Primary			

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	12	20	One day Monthly
Upper Primary	-		

Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)
Primary	Training Modules developed by NCERT
Upper Primary	

12. How many NFE learners were declared passed?

Year Primary Stage		Upper I	Primary Stage	
	Total No. of Learners	Number passed	Total No. of Learners	Number passed
1997	2967	62		
1998	2715	318		
1999	2617	357		,

13. Who certifies achievement of NFE learners?

Stage	Certifies
Primary	National Open School New Delhi.
Upper Primary	***

14	Is the certificate recognized by the Govt./State Board?	,,,,,,	yes
----	---	--------	-----

Any other special feature of NGO—Organization —. Established primarily on Gandian Philosophy of Swaraj and empowerment the Society believes in people centred development initiatives.

	Submitted b	)y :	
Date	Signature	S/d	
	Name	Sushen Mahato	

## STATUS OF NON-GOVERNMENT ORGANISATION

- Name and Address of the Non-Government Organization (NGO) with pin code Santal Pargana Antyodaya Ashram, Purandaha B. Devghar-814112 (Bilhar)
- 2 Registration No With date of registration-- 157, date. 22 8.1978
- 3 Year when NFE programme was started 1989-90
- 4 Number of blocks/mandals/projects covered One Block

5. Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary			30	30
Upper Primary	-	-	-	-

Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	416	334	750
Upper Primary	-	-	_

7 Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO? SRC, Patna Bihar

8 Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	27	3	30
Upper Primary	-	-	-

Stage	Minimum Educational Qualifications
Primary	Matric 27, I.A. 2, BA-1
Upper Primary	

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	30	20	
Upper Primary			

11. Which training package(s), if any, is/are being used for training for Instructors/teachers?

Stage	Name(s) of training package(s)
Primary	MML Based
Upper Primary	

12 How many NFE learners were declared passed?

Year	Primary Stage		Upper Primary Stage	
	Total No. of Learners	Number passed	Total No. of Learners	Number passed
1997	750	425	-	-
1998	750	450	-	-
1999	750	500	-	-

Stage	Certifies
Primary	Project Officer (UFE)
Upper Primary	

- 14. Is the certificate recognized by the Govt./State Board? ... Yes....
- Any other special feature of NGO—Organization—.
  3000 Bonded labours were released and rehabilitate 575-dersted women disputes settled, 120 acres of land was planted.

		Submitted by	
Date	Signature	S/d	
	Name	Dr. A.K. Mishra	

# STATUS OF NON-GOVERNMENT ORGANISATION

- Name and Address of the Non-Government Organization (NGO) with pin code: Santhal pargana Gramadyog Samiti At Po. Baidyanath-Deoghar (Bihar) Pin-814112
- 2. Registration No. With date of registration-- 5- date 17.4.1956
- 3. Year when NFE programme was started 1989-90
- 4 Number of blocks/mandals/projects covered One Block

5. Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary	_	•	30	30
Upper Primary	-	-	-	-

Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	556	196	752
Upper Primary	-	-	•

7. Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO? SRC, Patna Bihar

8. Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	27	3	30
Upper Primary			

Stage	Minimum Educational Qualifications
Primary	I.A -3, Matric 20, Nonmatric 7=30
Upper Primary	

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	30 days	20 days	3 days
Upper Primary	-	-	-

11. Which training package(s), if any, is/are being used for training for Instructors/teachers?

Stage	Name(s) of training package(s)
Primary	MLL
Upper Primary	

12 How many NFE learners were declared passed?

Year	Primary Stage		Upper 1	Primary Stage
	Total No of Learners	Number passed	Total No. of Learners	Number passed
1997	750	145	-	-
1998	752	138	-	-
1999	750	-	-	-

Stage	Certifies	
Primary		
	Project Officer	
Upper Primary		

- 14. Is the certificate recognized by the Govt /State Board? ... Yes....
- Any other special feature of NGO—Organization—.
  Our Organization has been awarded during the year 1992-93 by the president of India with "Indira Priyadarshini vikas mitra Λward" doing precious in plantation (Social Forestry)

		Submitted by	
Date	Signature	S/d	
	Name	S.S. Roy	

# STATUS OF NON-GOVERNMENT ORGANISATION

- 1. Name and Address of the Non-Government Organization (NGO) with pin code: Jan Shikchhan Kendra, At -P.O., Chakai, Dist. Jamui 811303 (Bihar)
- 2. Registration No. With date of registration---- 411/86-89.
- 3. Year when NFE programme was started --- 1989
- 4. Number of blocks/mandals/projects covered --- One Block. (Chakai).

5. Total number of NFE Centres being run by the NGO --- 30

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary			30	30
Upper Primary				

6 Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	519	231	750
Upper Primary			

7 Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO?---- Jan Shiksha Nideshalaya, Patna.

8. Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	30		30
Upper Primary		-	

Stage	Minimum Educational Qualifications
Primary	Matriculation/Non-Matriculation
Upper Primary	week.

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	30 days	20 days	
Upper Primary	1		

Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)
Primary	M.L.L. Based
Upper Primary	

12 How many NFE learners were declared passed?

Year	Primary Stage		Upper Primary Stage	
	Total No of Learners	Number passed	Fotal No. of Learners	Number passed
1997	750	75		
1998	750	77		
1999	750	100		

13. Who certifies achievement of NFE learners?

Date

Stage	Certifies
Primary	P O & Supervisor
Upper Primary	

- 14 Is the certificate recognized by the Govt /State Board? --- Not response
- 15 Any other special feature of NGO— Cultural Developmental Project Formulation and Village level to Block level Organization etc..

	Submitted by	
Signature	S/d	
Name	Raj deo Choudhary	

### STATUS OF NON-GOVERNMENT ORGANISATION

- 1. Name and Address of the Non-Government Organization (NGO) with pin code: "ABHIYAN", Ramkrishna Colony, Sandal Pur, P.O. Mahendru, PATNA 800006, Bihar.
- 2. Registration No. With date of registration— 513/06-12-91
- 3. Year when NFE programme was started --- 01-10-1998
- 4. Number of blocks/mandals/projects covered -- One Block

5. Total number of NFE Centres being run by the NGO-25

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary			25	25
Upper Primary				

6 Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	367	301	668
Upper Primary			•

7. Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO?--- All materials prepared and available by S.R.C Patna and D R.U

8. Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	12	13	25
Upper Primary			

Stage	Minimum Educational Qualifications
Primary	Matriculation
Upper Primary	

10

Training status of NFE instructor/teacher

Stage	Number of days of pre -service training if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	12 days	8+10 days	
Upper Primary			

11. Which training package(s), if any, is/are being used for training for instructors/teachers'?

Stage	Name(s) of training package(s)
Primary	D.R U. & involve in other programmes
Upper Primary	

12. How many NFE learners were declared passed?

Year	Primary Stage		Upper P	rimary Stage
	Total No. of Learners	Number passed	Total No. of Learners	Number passed
1997				
1998	668	479		
1999	668	502		

Stage	Certifies
Primary	Not response
Upper Primary	<del></del>

- 14 Is the certificate recognized by the Govt /State Board?:- Not response
- 15 Any other special feature of NG:- Not response

		Submitted by	
Date	Signature	S/d	
	Name	Satyendra Prasad	

## STATUS OF NON-GOVERNMENT ORGANISATION

- Name and Address of the Non-Government Organization (NGO) with pin code: Binoba Arogya and Lok Shikshan Kendra, Jaikrishna Nagar, PO Baday, Via -Islampur, Bihar - 801303
- 2. Registration No. With date of registration---- 195/1987-88 (14/8/87.
- 3. Year when NFE programme was started. --- 60 centres 89-90, 40 Centres 96-97...
- 4. Number of blocks/mandals/projects covered One Block

5. Total number of NFE Centres being run by the NGO-- 100

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary	1	5	94	100
Upper Primary				••

6 Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	1666	1168	2834
Upper Primary			

7. Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO?—All materials prepared and available by S.R.C. and D.R.U.

8. Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	73	27	100
Upper Primary	==	4.0	

Stage	Minimum Educational Qualifications	
Primary	Matriculation to B.A.	
Upper Primary		

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary		8+12 days	
Upper Primary			

11 Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)	
Primary	D.R.U and involve in other programme	
Upper Primary		

12. How many NFE learners were declared passed?

Year	Prim	ary Stage	Upper Pi	rimary Stage
	Total No of Learners	Number passed	Total No. of Learners	Number passed
1997	2830	700		
1998	2827	476		75
1999	2838	474		70

Stage	Certifies
Primary	Not response
Upper Primary	

- 14 Is the certificate recognized by the Govt /State Board? ..... Not response
- 15 Other special feature of NGO (i)Child labour Education and Rehabilitation (ii) Non-Formal Education scatting -up (iii) Reproductive Child health (iv) Institute and sex worker AIDS awareness.

Submit	ted by		
Signature			S/d
Name	Shri	Sharma	

#### STATUS OF NON-GOVERNMENT ORGANISATION

- 1. Name and Address of the Non-Government Organization (NGO) with pin code.

  Saran Zila Samagra Vikas Seva Sansthan Dahinawan P O. Chhapra District Saran 
  841301 (Bihar)
- 2. Registration No. With date of registration-- 75/79-80l date 25 7.1979
- 3 Year when NFE programme was started. 01.07.1997
- 4. Number of blocks/mandals/projects covered one block

5 Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary	-		25	25
Upper Primary	_	-	•	-

6. Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	324	257	581
Upper Primary	-	-	-

7 Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO? SRC Patna Bihar

8 Total number of NFE instructors/teachers appointed by the NGO

Stage	Female Instructors	Male Instructors	Total	
Primary	09	16	25	
Upper Primary	-	-	-	

Stage	Minimum Educational Qualifications
Primary	Non Matric
Upper Primary	

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	12days	38 days	-
Upper Primary		•	-

Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)
Primary	DRU, Samanvana Ashram Bodh Gaya (Bihar)
Upper Primary	

12 How many NFE learners were declared passed?

Year	Pri	Primary Stage		r Primary Stage
	Total No. of Learners	Number passed	Total No. of Learners	Number passed
1997	-	-	-	-
1998	581	255	_	-
1999	Not response			

Stage	Certifies	
Primary	Organization Internal Evaluation Team	
Upper Primary		

- Is the certificate recognized by the Govt./State Board? .. Not response...
- 15 Any other special feature of NGO-- Income Generation programme, Non Govt. Khadi Production, Health Training, Peoples organization, etc.

	Submitted by :		
Date:	Signature	S/d	
	Name	Dinesh Chandra	

# STATUS OF NON-GOVERNMENT ORGANISATION

- 1. Name and Address of the Non-Government Organization (NGO) with pin code: Xaviers Chaibasa, St. Xaviers High School- P.B. 10, Lupungutu, Sest Singhbhum Bihar 833201
- 2. Registration No. With date of registration-- 22 of 1955-1956
- 3. Year when NFE programme was started. 1990
- 4. Number of blocks/mandals/projects covered Two

5. Total number of NFE Centres being run by the NGO - 102

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary	-	•	102	102
Upper Primary	•	-	-	•

6. Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	1,701_	1,895	3,596
Upper Primary	-	-	. •

7 Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO? books for language prepared by Xaviers chaibasa, published by Bihar State text book publishing corporation

8. Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	71	31	102
Upper Primary	-	•	-

Stage	Minimum Educational Qualifications
Primary	5 teachers 8 th pass, 4 teachers 9th Pass, the rest 10th or above
Upper Primary	

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary		18 days	monthly training by trainers and sup
Upper Primary	-	-	

Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)	
Primary	Programme developed by Tribal Research and Training Centre	
	chaibasa	
Upper Primary	,	

How many NFE learners were declared passed?

Year	Prim	ary Stage	Upper P	rimary Stage
	Total No of Learners	Number passed	Total No. of Learners	Number passed
1997	3189	350	-	
1998	3445	221	-	
1999	2596	249	-	-

Stage	Certifies
Primary	Project Officer and Team
Upper Primary	

- Is the certificate recognized by the Govt./State Board? ... We don't have any statement. But local schools accept our certificate
- Any other special feature of NGO—Organization -. Nukkad puppet show training, literacy day celebrations at 10 place, kbal mela at 10 places, for language text books in the local language (Ho)

	Submitted by ·		
Date	Signature	S/d	
	Name	Jerry cutiuhas J	

#### STATUS OF NON-GOVERNMENT ORGANISATION

- Name and Address of the Non-Government Organization (NGO) with pin code.

  Abha Christian Social Welfare Society, C/O Catholic Church At & PO. -Chanpatia 845449
- 2 Registration No. With date of registration---- 384 (1983-84)
- 3 Year when NFE programme was started. --- 1998
- 4 Number of blocks/mandals/projects covered 1 (One)

5 Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary	03	08	14	25
Upper Primary				<b>6-</b>

6. Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	438	187	625
Upper Primary	n_ sh		

7. Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO?--- My own Teaching Learning Materials used.

8 Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	20	05	25
Upper Primary			

Stage	Minimum Educational Qualifications
Primary	Middle
Upper Primary	

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary		30 days	2 days
Upper Primary			,

Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)
Primary	· N.A.
Upper Primary	

12. How many NFE learners were declared passed?

Year	Primary Stage		Upper Primar	y Stage
	Total No. of Learners	Number passed	Total No. of Learners	Number passed
1997	1500	1253		
1998	1500	1298		
1999	1500	1439		

Stage	Certifies
Primary	Instructor/Supervisor
Upper Primary	

- 14 Is the certificate recognized by the Govt /State Board? .....No.
- Any other special feature of NGO:-- Gram Bharti has its close contact of 500 villages in three blocks of Jamui district named Jhajha., Chakai and Sono. They are organized gram sabha (Village assemblies) on the Gramdan principles...

		Submitted by	
Date.	Signature	S/d	
	Name Md S	Saqbir Ahmed	

# STATUS OF NON-GOVERNMENT ORGANISATION

- Name and Address of the Non-Government Organization (NGO) with pin code GRAM BHARTI (SARVODAYA ASHRAM) PO. – SIMULTALA, DISTT – JAMUI, BIHAR, PIN - 811316
- 2 Registration No. With date of registration 73 of 30<sup>th</sup>, July, 1977
- 3. Year when NFE programme was started .- 1994-95.
- 4 Number of blocks/mandals/projects covered: 3 Blocks
- 5. Total number of NFE Centres being run by the NGO: 50

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary			50	50
Upper Primary	20 No.			# <del>**</del>

6 Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	1059	441	1500
Upper Primary			

7 Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO? :- Text books prepared by DRU

8. Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	43	07	50
Upper Primary			

Stage	Minimum Educational Qualifications
Primary	Middle
Upper Primary	

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary		30 days	2 days
Upper Primary			

Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)
Primary	N.A.
Upper Primary	

12. How many NFE learners were declared passed?

Year	Primary Stage		Upper P	rimary Stage
	Total No. of	Number passed	Total No of	Number passed
	Learners		Learners_	
1997	1500	1253		
1998	1500	1298		# %
1999	1500	1439		

Stage	Certifies		
Primary	Instructor/Supervisor		
Upper Primary			

- 14. Is the certificate recognized by the Govt /State Board? .- No.
- Any other special feature of NGO: Gram Bharti has its close contact of 500 Villages in three blocks of Jamui district named Jhajha, Chakai and Sono. They Are organized gram sabha (Village assemblies) on the Gramdan principles.

		Submitted by .	
Date <sup>-</sup>	Signature	S/d	
	Name	Md Sabir Ahmed	

### STATUS OF NON-GOVERNMENT ORGANISATION

- Name and Λddress of the Non-Government Organization (NGO) with pin code BANWASI VIKAS ASHRAM, AT AND PO.- BAGODAR, PIN - 825 322, DIST - GIRIDIH, BIHAR, INDIA
- 2. Registration No With date of registration--- 618/89-90 Date 9 March 1990
- 3. Year when NFE programme was started --- 1 August 1997
- 4 Number of blocks/mandals/projects covered --- One Block 12 Villages

5 Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary	45	5		50
Upper Primary				

6 Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	380	656	1036
Upper Primary			

Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO? .- SRC Patna and DRU hazaribagh self produced

8 Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	26	10	36
Upper Primary			

Stage	Minimum Educational Qualifications
Primary	10 <sup>th</sup> Pass
Upper Primary	_

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	12 days	10 days	
Upper Primary	~-		

Which training package(s), if any, 1s/are being used for training for 11 instructors/teachers?

Stage	Name(s) of training package(s)	
Primary	DRU Hazaribagh	
Upper Primary		•

12. How many NFE learners were declared passed?

Year	Primary S	Primary Stage		ry Stage
	Total No of Learners	Number passed	Total No. of Learners	Number passed
1997	1250			
1998	1250	510		
1999	1036	299		

Stage	Certifies
Primary	Supervisor and P.O
Upper Primary	

- Is the certificate recognized by the Govt /State Board? :- No 14
- Any other special feature of NGO:- (i) Micro Planning of Education Through 15 speed progframme. (ii) Self help group and committee organization.

		Submitted by:
Date.	Signature	S/d
	Name	Suresh Kumar Shakti

#### STATUS OF NON-GOVERNMENT ORGANISATION

- Name and Address of the Non-Government Organization (NGO) with pin code:

  Jharia Mahila Vikas Kendra, Add Tulsyan House, Gandhi road, P.O. Jharia,
  Dist. Dhanbad, Pin Code 828111.
- 2. Registration No. With date of registration: 128 of 1976-77/15/01/1977.
- 3. Year when NFE programme was started Not response.
- 4 Number of blocks/mandals/projects covered: One Block (Jharia)

5 Total number of NFE Centres being run by the NGO: -

Stage	Boys-Centres	Girls Centres	Co-ed. Centres	Total
Primary	<b></b>		25	25
Upper Primary		<b></b>		

6 Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	375	250	625
Upper Primary			

7. Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO? - Learning material prepared by SRC Patna.

8 Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	23	2	25
Upper Primary			

Stage	Minimum Educational Qualifications		
Primary	Matriculate		
Upper Primary			

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary		30 days	•••
Upper Primary			

11. Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)
Primary	DRU Hazaribagh
Upper Primary	

12. How many NFE learners were declared passed?

Year	Primary Stage		Upper Primary Stage	
	Total No. of	Number passed	Total No. of	Number passed
	Learners		Learners	_
1997	625	455		
1998	625	470		
1999	625	485	Pa 44	

Stage	Certifies
Primary	Project Officer
Upper Primary	

- 14 Is the certificate recognized by the Govt./State Board?:- No
- Any other special feature of NGO.- This NGO is working in the field of Coal Mines area and for providing Education to the children of Coal Mines workers

		Submitted by :		
Date	Signature	S/d		
	Name	Smt. Pushpa Devi Tulsyan		

## STATUS OF NON-GOVERNMENT ORGANISATION

- Name and Address of the Non-Government Organization (NGO) with pin code People Institute for Development & Training (PIDE). C 1/1414, Basant Kunj, New Delhi – 110070
- 2. Registration No With date of registration--- No. -6/10775 date 07.02.1980.
- 3. Year when NFE programme was started. --- July, 1995.
- 4 Number of blocks/mandals/projects covered -- One Block (Madhu Pur) Bihar.

5 Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary	11	02	87	100
Upper Primary		**		

6. Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	1514	986	2500
Upper Primary			

7. Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO? - SRC Bihar, NCERT, and own Institute (DRU)

8 Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	92	08	100
Upper Primary			

9 Minimum educational qualifications of instructors/teachers

Stage	Minimum Educational Qualifications
Primary	7 <sup>th</sup> to Graduate
Upper Primary	

10 Training status of NFE instructor/teacher

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	30 days 1 <sup>st</sup> year,	20 days 2 <sup>nd</sup> year	3 days (EVS)
Upper Primary			4

11. Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)		
Primary	NCERT & SRC, Patna		
Upper Primary			

12. How many NFE learners were declared passed?

Year Pi		ary Stage	Upper P	rimary Stage
	Total No of Learners	Number passed	Total No. of Learners	Number passed
1997	2290 + 210	1382		
1998_	2225 + 275	1169		
1999	2500	2160		

13 Who certifies achievement of NFE learners?

Stage	Certifies	
Primary	Project team	
Upper Primary	N#	

- Is the certificate recognized by the Govt./State Board? --- Not response
- Any other special feature of NGO— Environment Programme, Savings Programmes (Mahila Kosh), Beekeeping, public health etc.

	Submitted by		
Date.	Signature	S/d	
	Name	Akhilesh Kumar Tiwari	

## STATUS OF NON-GOVERNMENT ORGANISATION

- Name and Address of the Non-Government Organization (NGO) with pin code.
   "Shama Vikas Samiti" Ansar Nagar, Malah Bigha, At P.O. Islampur, Dist.
   Nalanda Pin 801303. (Bihar)
- 2. Registration No. With date of registration— 278-87-88/19<sup>th</sup> October, 1987.
- 3 Year when NFE programme was started 1997.
- 4. Number of blocks/mandals/projects covered One Block (Islampur)

5. Total number of NFE Centres being run by the NGO: 25

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary	14	05	06	25
Upper Primary			····Ly	

6. Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	414	268	682
Upper Primary			

7 Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO? .- NCERT, SRC Patna

8 Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	19	06	25
Upper Primary		7-	

9 Minimum educational qualifications of instructors/teachers

Stage	Minimum Educational Qualifications	
Primary	Matric	
Upper Primary	==	

10 Training status of NFE instructor/teacher

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	30 days	30 days	
Upper Primary			

Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)
Primary	DRU, Samanvay Ashram, Bodhgaya - Gaya
Upper Primary	67

12. How many NFE learners were declared passed?

Year	Prim	ary Stage	Upper P	rimary Stage
	Total No of Learners	Number passed	Total No. of Learners	Number passed
1997	671	649		
1998	672	469		
1999	682	=-	Eq. 94	

13. Who certifies achievement of NFE learners?

Stage	Certifies	
Primary	Project Committee	
Upper Primary		

- 14 Is the certificate recognized by the Govt./State Board? State Government..
- 15 Any other special feature of NGO NR

		Submitted by:
Date	Signature	S/d
	Name	Md Moharak Susain

## STATUS OF NON-GOVERNMENT ORGANISATION

- 1. Name and Address of the Non-Government Organization (NGO) with pin code: BIHAR GRAMIN MAHILA KALYAN PARISAD, AT FATEHPUR P.O SUHIRD NAGAR, DIST. BEGUSARAI (BIHAR) PIN 851218.
- 2. Registration No With date of registration: 51/68-69 Dated 12<sup>th</sup> March, 1969.
- 3. Year when NFE programme was started.: 01/10/1997.
- 4. Number of blocks/mandals/projects covered :- One

5. Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary			20	_20
Upper Primary			••	***

6. Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	297	213	510
Upper Primary	84	•	

7. Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO? - C R.U Bihar

8. Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	10	10	20
Upper Primary	-	-	-

9 Minimum educational qualifications of instructors/teachers

Stage	Minimum Educational Qualifications
Primary	Matriculation
Upper Primary	-

10 Training status of NFE instructor/teacher

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	30	5	2 days
Upper Primary	-	-	-

Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)
Primary	Dist Non-Formal Training Centre Begusarai
Upper	-
Primary	

12 How many NFE learners were declared passed?

Year	Primary Stage		Upper Prima	ry Stage
	Total No of Learners	Number passed	Total No. of Learners	Number passed
1997				
1998	510	30		
1999	510			

13. Who certifies achievement of NFE learners?

Stage	Certifies
Primary	Sarpanch, NGO Project Oficers
Upper Primary	

- 14 Is the certificate recognized by the Govt./State Board? :- No.
- 15 Any other special feature of NGO: Development of Non-Formal Scheme.

	Submitted by:		
Date <sup>-</sup>	Signature	S/d	
	Name	Rajnesh Kumar	

#### STATUS OF NON-GOVERNMENT ORGANISATION

- 1. Name and Address of the Non-Government Organization (NGO) with pin code GRAM SWARAJYA ASHRAM, LOK YATRA DHAM DHAMAULI, PO.-WENA, DISTT NALANDA, PIN 803110 (BIHAR).
- 2. Registration No With date of registration 89/1977-78, Dated 03/09/1977
- 3 Year when NFE programme was started .- 1989-90
- 4 Number of blocks/mandals/projects covered 1 (One)

5 Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary			30	30
Upper Primary				

6 Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	374	376	750
Upper Primary		**	

7 Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO? - Slogans, Songs, Nukkar Natak etc

8 Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	18	12	30
Upper Primary			

9 Minimum educational qualifications of instructors/teachers

Stage	Minimum Educational Qualifications
Primary	Matriculation
Upper Primary	••

10 Training status of NFE instructor/teacher

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	w-	30/20	
Upper Primary	·-		

11. Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)
Primary	According to Trainer sandarshika
Upper Primary	

How many NFE learners were declared passed?

Year	Prim	ary Stage	Upper	Primary Stage
	Total No of	Number passed	Total No of	Number passed
	Learners		Learners	
1997	750	94		
1998	750	109		
1999	750	123		

13. Who certifies achievement of NFE learners?

Stage	Certifies
Primary	Project Officer, Village Education committee
Upper Primary	

- 14. Is the certificate recognized by the Govt./State Board? :- No.
- Any other special feature of NGO: The fund is not being released in time by the Ministry of Human Resource Development Due to this reason, the Organization has to face economically difficulties.

Submitted by .		Submitted by .	
Date:	Signature	S/d	
	Name	Brija Nandan Prasad	

#### STATUS OF NON-GOVERNMENT ORGANISATION

- 1. Name and Address of the Non-Government Organization (NGO) with pin code: J P. Saraisa Seva Ashram, Kaua Chowk, p O.. Jorpura, Via Patory, Distt samastipur (Bihar) Pin 848504
- 2 Registration No With date of registration: 294/80-81 dated, 21.11 1980.
- 3 Year when NFE programme was started :- July, 1990
- 4. Number of blocks/mandals/projects covered: One Block

5 Total number of NFE Centres being run by the NGO: - 30

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary	11	13	6	30
Upper Primary				

6. Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	347	403	750
Upper Primary			

Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO? - (i) Bihar State (NFE) Resource Centre (ii) Others, as Advisory Committee.

8 Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	13	17	30
Upper Primary			

9 Minimum educational qualifications of instructors/teachers

Stage	Minimum Educational Qualifications
Primary	Matriculation
Upper Primary	N A

10. Training status of NFE instructor/teacher

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	12	20	
Upper Primary			24 54

Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)		
Primary	Training package developed by DRU Bodh Gaya, Bihar		
Upper Primary	N.A		

12. How many NFE learners were declared passed?

Year Prima		ry Stage	Upper Primary Stage	
	Total No of Learners	Number passed	Total No. of Learners	Number passed
1997	750	602		
1998	750	76		
1999	750	222		

13. Who certifies achievement of NFE learners?

Stage	Certifies
Primary	(i) Project Co-ordination Committee of NGO,
	(ii) Village Education Committee.
Upper Primary	N.A.

- 14 Is the certificate recognized by the Govt./State Board?:- Yes
- Any other special feature of NGO: (i) Organization of vocational courses of training for the 'NFE Learners' (ii) Mobilization of institutional credit for working Capital for the traubees.

Date.	Signature	S/d
	Name	Swani Rahesgwar Bharati

## STATUS OF NON-GOVERNMENT ORGANISATION

- Name and Address of the Non-Government Organization (NGO) with pin code:
   PRAKHAND LOK VIKAS SAMITI, MADHEPUR, VILL. + PO PACHAI, VIA M ADHEPUR, DISTT MADHUBANI, (BIHAR). PIN 847408.
- 2. Registration No. With date of registration 15, Patna, date 01 May, 1979-80. F.C.R.A. No 031290017. Date 19 august 1993
- 3. Year when NFE programme was started. 01 April, 1990
- 4. Number of blocks/mandals/projects covered: -

5. Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary			30	30
Upper Primary				

6 Total number of learners of Centres being run by the NGO

Stage	Boys	Girls-	Total
Primary	513	387	900
Upper Primary			

7 Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO? :- Jan Shiksha nideshalaya, Patna (Bihar) P Red, Betia. (Bihar)

8 Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	- 26	4	30
Upper-Primary			~~

9 Minimum educational qualifications of instructors/teachers

Stage	Minimum Educational Qualifications		
Primary	Matric		
Upper Primary	lb.a		

10 Training status of NFE instructor/teacher

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	12 days	12+8 = 20 days	(O.B) (D.S P.) (D.W.A.C)
Upper Primary			

Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)		
Primary	Distt. Resource Unit, Madhubani, Distt. Resource Unit, Betia, State Unit, Patna, P O. P supervisor being trained by NCERT Camp Patna in the year 1994.		
Upper Primary			

12 How many NFE learners were declared passed?

Year	Primary Stage		Upper Primary Stage	
	Total No. of	Number passed	Total No. of	Number passed
	Learners		Learners	
1997	900	217		
1998	900	332		
1999	900	457		

13. Who certifies achievement of NFE learners?

Stage	Certifies
Primary	Total Education Samiti.
Upper Primary	

- 14. Is the certificate recognized by the Govt./State Board? govt.
- Any other special feature of NGO: Prakhand Lok Vikas Samiti, Madhepur is Working in the flood affected area in which Koshi, Kamala, Gahuma, Balan Rivers flow. The area is often water (Ogiding. Samiti wants to stabilize Alternative School for education for all.

Date.	Signature	S/d	
	Name	Mahavir Prasad Mahto	_

## STATUS OF NON-GOVERNMENT ORGANISATION

- Name and Address of the Non-Government Organization (NGO) with pin code Samajik Vikas Sansthan, At P.O. Tamuria, Distt. M adhubani, Pin 847410. (Bihar).
- 2. Registration No. With date of registration 128/87-88/30 June, 1987.
- 3. Year when NFE programme was started. :- 01-04-1996.
- 4. Number of blocks/mandals/projects covered :- Lakhanaur Block.

5. Total number of NFE Centres being run by the NGO

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary		<u></u> -	25	25
Upper Primary	71.00	==		

6 Total number of learners of Centres being run by the NGO

Stage	Boys	Girls	Total
Primary	359	266	625
Upper Primary			

- 7 Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO? N.R
- 8. Total number of NFE instructors/teachers appointed by the NGO

9. Minimum educational qualifications of instructors/teachers

Stage	Minimum Educational Qualifications
Primary	Matric, Inter, B.A.
Upper Primary	

10 Training status of NFE instructor/teacher

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	30 days	20 days	,,
Upper Primary			***

11. Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)
Primary	N R.
Upper Primary	·

12. How many NFE learners were declared passed?

Year	r Primary Stage		Upper Pr	rimary Stage
	Total No of Learners	Number passed	Total No. of Learners	Number passed
1997	625			
1998	625	27		
1999	625	40	,.	

13. Who certifies achievement of NFE learners?

Stage	Certifies
Primary	NR
Upper Primary	

- 14 Is the certificate recognized by the Govt /State Board? :- N.R
- 15 Any other special feature of NGO. N.R.

		Submitted by:
Date	Signature	S/d
	Name	Sh Rameshwar Mahato

## STATUS OF NON-GOVERNMENT ORGANISATION

- 1. Name and Address of the Non-Government Organization (NGO) with pin code. Bihar Pradesh Bharat Sevak Samaj, Daroga Prasad Rai Path, Patna 1.
- 2. Registration No. With date of registration: 22, 19-6-1967.
- 3. Year when NFE programme was started :- 16-8-1996.
- 4. Number of blocks/mandals/projects covered. 1 Barati Block only.

5. Total number of NFE Centres being run by the NGO. - 50 only

Stage	Boys Centres	Girls Centres	Co-ed. Centres	Total
Primary			50	50
Upper Primary			••	

6. Total number of learners of Centres being run by the NGO: 1250 Mixed classes

Stage	Boys	Girls	Total
Primary	620	630	1250
Upper Primary			

7. Teaching-learning materials produced by whom are being used at NFE Centres being run by the NGO? :- Generally the materials produced from the govt. agency are being used in respect of the books but this is not exception. One book was produced by the organization itself besides printing of the copies.

8. Total number of NFE instructors/teachers appointed by the NGO

Stage	Male Instructors	Female Instructors	Total
Primary	28	22	50
Upper Primary			

9 Minimum educational qualifications of instructors/teachers

Stage	Minimum Educational Qualifications
Primary	Non-Matric and Matriculation
Upper Primary	

10 Training status of NFE instructor/teacher

Stage	Number of days of pre-service training, if any	Number of days of in-service training per year	Any other training and number of days of such training
Primary	21 days		
Upper Primary	-		

11. Which training package(s), if any, is/are being used for training for instructors/teachers?

Stage	Name(s) of training package(s)
Primary	N.R.
Upper Primary	

12 How many NFE learners were declared passed?

Year	Pr	imary Stage	Upper	Primary Stage
	Total No. of	Number passed	Total No of	Number passed
	Learners		Learners	
1997	N.R			
1998	N.R.			
1999	N.R			

Who certifies achievement of NFE learners?

Stage	Certifies
Primary	B.D.O. & NGO Committee
Upper Primary	

- 14. Is the certificate recognized by the Govt /State Board? Yes
- 15 Any other special feature of NGO: N.R.

		Submitted by .	
Date	Signature	S/d	•
	Name	Sh. Prabhu Dayal Tiwari	

#### **EVALUATION OF NFE CHILDREN**

#### Introduction

It is generally observed that the method of evaluation determines teaching-. methodology at every state of education. It is for this reason that examinations have come under severe criticism in our educational system. Evaluation in Non-Formal Education is continuous, comprehensive and competency-based. The emphasis here is on acquisition of competencies by the learner rather than on acquiring memory abilities.

Non-Formal Education (NFE) in India has been visualized as a strategy of achieving the goal of Universalisation of Elementary Education (UEE). It is defined as planned and deliberate educational activities/programmes for out-of—school children in the age group 6-14 leading to the achievement of learning outcomes comparable to that of the children from formal elementary schools. The stress in NFE is on the achievement of the prescribed learning outcomes which are determined by the 'comparability' or 'equivalence' factor with those of the formal schools. Knowledge component becomes only a tool in the achievement of competencies and hence need not be over emphasized. Again, it essentially leaves enough flexibility in the methodology of achieving these competencies which is the spirit of Non-Formal Education.

### Nature-of Evaluation in NFE

The major factor in NFE is the achievement of the competencies to a desired level where it can be used with proficiency. Time frame is of secondary importance. The level

of mastery in using the competencies in varying and unfamiliar situations is the main concern of evaluation in NFE. Apart from this, the non-cognitive factors like the development of positive attitude and other behavioral aspects of personality are equally important.

Therefore, the main points that emerge out of these considerations in evaluation of the learners in NFE system are as follows:

#### 1. Acquisition of competencies upto a Desired Level

NFE children should be evaluated on the criteria of achievement of competency. The term 'competency' implies the use of the acquired 'skills' and 'understandings' in a competent manner, i.e., effectively. Children should be able to use them in varying and unfamiliar situations of their day-to-day life.

#### 2. Flexibility of Time-Frame

The time taken in achieving the skills and understandings upto mastery level has not been rigidly prescribed in NFE. Acquisition of competency is of major concern. For example, it may happen that learner 'A' acquires in say, two months, learner 'B' in six months and learner 'C' in a year. As long as he/she does not acquire it to the desired level, he/she should not move to the next competency in the hierarchy of learning levels. What is more important is the acquisition of skills and understandings upto that degree where he/she can apply them proficiently in all situations arising in their day-to-day life. Thus, the competency becomes a permanent asset with the learner.

On the other hand in fromal schooling system a child is often declared passed by securing 33% marks in the totality of all competencies combined together. He/she may leave a number of competencies totally untouched and still secure the desired percentage of pass marks. Even in competencies acquired by him/her, it is not essential that mastery

learning might have taken place. The major concern of the teacher in formal system is to make him/her so competent that he/she is able to secure at least 33% marks in examination.

## 3. Knowledge component in NFE simply a Tool

Knowledge is only a tool or means to acquire the desired competencies. Therefore, in evaluation in NFE, it does not remain a main item for testing or measurement. Ultimately, it is the acquisition of competencies which is to be evaluated.

#### 4. Evaluation to be Text-Free

Since competencies can be achieved by means of variety of texts or sometimes even without texts, evaluation in NFE is called text-free. The situations, wherein acquired skills and understandings are applied are mostly novel and sometimes unfamiliar

#### 5. Evaluation to be Formative

Evaluation in NFE has to be formative in nature throughout, since at various stages of learning different competencies are to be evaluated for diagnostic and remedial teaching. If it becomes absolutely necessary to have a summative evaluation, ilt could be done at the end of primary stage or at the end of middle (upper primary) stage.

## 6. Evaluation to be-continuous and-comprehensive

Since in NFE, without mastery learning of one competency we do not move to the next competency, each competency is tested for diagnostic and remedial teaching. It is, therefore, desirable that in NEE the process of evaluation has to be continuous.

Competencies to be acquired by children could be both cognitive or non-cognitive in nature. Along with the desired skills and understandings, evaluation in NFE takes care of non-cognitive aspects like development of positive attitudes, scientific aptitude and other equalities of good personality. Often such qualities are tested by means of observation of the behavior of the children. Thus, evaluation should not only confine to written examinations alone, it has to be comprehensive.

Although continuous and comprehensive evaluation has been mostly concerned with evaluating the 'knowledge' component and less calculating 'understanding' component and practically not evaluating either 'application' or skill component.

#### Methodology of Evaluation in NFE

The complete range of minimum levels of learning (MLLs) are to be charted. When a child enters NFE centre, the instructor has to assess the stage at which the child stands with respect to various MLLs in different learning areas. The assessment can be made on the basis of his/her interaction with the child within and without the centre. His/her assessment is to be marked in the chart in terms of dates on which the child has shown his acquisition of the competencies. It may be noted that under each competency, there are sub competencies. It depends on the instructor whether he/she would mak achievement of each sub competency or take the whole competency as one unit. In order to know it, it may be necessary to test orally, in written form or through observation, even looking at the work done in the class. It may be pertinent to ask what is the level of mastery that should be taken as indicator of acquisition of a particular competency. We think that 80% of mastery level should be taken as indicator, but we do not have empirical data to stick to it. Our hunch is that these being foundations of learning competencies, is should be fairly strong and permanent and hence the suggestion of 80%. Again, the instructor's satisfaction would have to be relied upon and it would be quite subjective. But, then we have to trust the instructor on this score, because, unless we do it, we may fall prey to all kinds of formal testing techniques which do not go in consonance with the spirit, approach and time constraints of NFE system.

Now having marked different stages at which the child is in cognitive and non-cognitive areas the instructor proceeds with the instructional process. He/she will have to keep a conscious watch on the progress o the child and only when he she is satisfied that the child has achieved a particular competency, he/she will move to the next competency in hierarchy in that particular discipline (subject area). Having satisfied himself/herself that the competency has been mastered to the level discussed above, he/she would mark it so in the chart with the date on which the child has acquired it.

Thus, when all the columns in the chart in respect of a particular child are filled up, he/she is supposed to have achieved the desired competence for the entire primary stage. It may take, for a particular child, to achieve this success in a time of two years, less than two years or more than two years. It should not bother us. Unless the child has acquired all the competencies given in MLLs, he should not be deemed as having completed the primary stage of education.

If the evaluation system advocated above, is adopted, it will be ensured that acquisition of competencies becomes the prime concern of teaching-learning process and hence permanency of learning is ensured. Stress on rote learning will automatically lesson and a number of draw-backs of our formal system will be reduced.

## CHARACTERISTICES OF A GOOD QUESTION

A question is the basic unit of testing of all kinds. When it also becomes a scoring unit, it is sometimes referred to as 'item' or 'test-item'. For the sake of convenience, we shall not make any distinction between a question and an item in the discussion that follow:

## Question As a Means of Motivation in the class-room situation

It is not only in testing that questions are used. Their potentiality for instructional purposes has been recognized since long. They help the teacher at all stages of a lesson such as its introduction, development and review. Nothing could work as a better means of motivation in a class-room situation. The knowledge, that a student can answer his teacher's question correctly, motivates him for better learning. Thus, question can be used for stimulating and maintaining interest in particular subject.

## Questions Help in Maintaining class-room Discipline

It has been rightly pointed out that discipline is a matter of being able to get attention when you want it. It is through questions that a teacher can get the attention of the class and thereby maintain class-room discipline.

# Questions Help in Increasing Retentively of the Subject Matter

Questions not only help in the development of subject matter and presentation of principles and process, but are also used for drill and reinforcement of concepts, thereby increasing the retentively of the subject matter.

#### Questions Help in Evaluating Performance of Children

It is through questions that we can partly provide for individual differences. They become the basis of different types of pupil-evaluation like achievement testing and even self-appraisal by students. Diagnostic and remedial programmes in a subject, particularly mathematics depend upon questions.

Thus, questions are very significant for any subject matter or discipline. The following aspects of a question are important.

#### (1) Validity

The concepts of validity and reliability are generally used for tests but may also be employed for questions since each question constitutes a test in itself.

A question is said to be valid if it serves the purpose for which it has been framed. To the extent, it fails to do what it purports to do, it loses its validity. A test-item will not be said to be valid if it is not related to the specified curriculum. In order that a question may be valid, it should have the following qualities.

- (i) The question should be based on a predetermined objective. Every question tests some instructional objective. What we mean is that its framer must be sure of the objective that is being tested.
- (ii) The item must be based on a specific content area. The framer must be sure that it measures the specified content more than any thing else. Sometimes a test-item set in one content area comes out to test quite a different content area.

## (2) Reliability

A test item is said to be reliable if the answer to it gives the true achievement of the student. In other words, the resulting score must be free

from chance errors. These chance errors generally occur because of the vagueness of the language or directions. The following steps can ensure high reliability of a test item.

- (i) The item should admit of one and only one interpretation. If the task is not clear, it will lead to chance errors.
- (ii) The scope of the answer should be made clear.
- (iii) The directions to the question should be clear and unambiguous.
- (iv) A well though-out marking scheme for the question should be available.

## (3) Difficulty Level

Difficulty level is a very important characteristic of an item. It ultimately determines the distribution of scores given by the question paper as whole. We generally call an item a difficult item if less than 30% of children are able to solve it correctly.

If 30% to 70% of the children are able to solve it correctly, it is termed as an average item, i.e. an item of average difficulty level. In case, more than 70% of the children can solve it correctly, it is called an easy item or an item of low difficulty level.

There are some intrinsic factors, which contribute to the difficulty level of an item. Such factors are- the objective, on which the item is based, the nature of content, teaching methodology, etc. All these should be taken into account while estimating the level of difficulty of a test-item.

The difficulty level should be controlled at the time of framing a test item and with the help of the experience of the teacher/ examiner/author it must be

estimated at that time so that the decision regarding the inclusion of the text-item in a particular test-paper/book is facilitated.

#### (4) Discriminating power

Discriminating power of an item, although intimately related to the difficulty level, works more mysteriously. It is very difficult to estimate the discriminating power or an item. While the difficulty level of an item determines, in parts, ilts ability to discriminate among student of different achievement levels, items of the same difficulty level do not always equally discriminate. This may happen because of certain defects in the questions like implausible distracters, inadvertent clues or involvement of some extraneous factors in testing situation.

The following steps, if taken, will ensure high discriminating power for the item.

- (i) The distracters in case of multiple case items must be plausible.
- (ii) There must not exist any clues for obtaining correct answer for the item.
- (iii) Ambiguities and technical inaccuracies must be avoided.

#### Form

There are different forms of a question. Each form is more suitable than others in certain situations. Therefore, for a particular situation, the question should be of appropriate form.

## (5) Practical considerations

Besides the above mentioned aspects of a question, there are some other practical considerations which should be kept in mind while framing it. Some of the important considerations are:

- (i) Economy
- (ii) Facilities for printing
- (iii) Convenience in administration
- (iv) Ease of scoring.

## **DIFFERENT FORMS OF QUESTIONS**

Various forms of questions are in vogue in testing. In a particular situation a particular form is more suitable than others. Depending upon the objective and content, one may select a particular form of question to test a particular learning outcome.

Our most commonly used tools of evaluation are written tests which generally contain two types of questions:

- 1. Free response questions
- 2. Fixed response questions

In a free response question, an examinee formulates and organizes his answer. The type of tests containing free response questions is very much in use in the prevailing system of board examinations. In a fixed response question the answer is fixed and definite, Fixed response questions are being used most commonly in selection tests due to objectivity in scoring. However, both types of questions have considerable value when properly used. Many qualifying examinations are using tests containing a mixture of both free response and fixed response questions. Free response questions are usually of two types:-

- (1) Essay type or long answer type.
- (2) Short answer type.

Fixed response questions are also of two types:

- (1) Very short answer type
- (2) Objective type, which includes items o multiple choice type, truefalse type, completion type and matching type. Her we shall discuss these types of questions in details.

## (1) Essay or Long Answer Type Questions

If in solving a question, a student is expected to take more than 4 steps, it is called an essay or long answer type question. These questions require the students to select relevant facts, organize them and write answer in their own words. /Essay type questions, if properly constructed, can measure the desired achievement of ability of the children scientifically.

#### Advantages of Essay Type Questions

- (i) An essay type question is particularly appropriate for testing the achievement of objectives which involve the ability to organize information and communicate the information efficiently and effectively in the form of a written discussion. It is the only form which ensures validity in the measurement of creative thinking.
- (ii) Essay type questions minimize the possibility of getting the right answers through guessing. In answering such a question an examinee operates without the aid of special clues as appears in choice items
- (iii) They are comparatively easy to prepare. Multiple choice items involve additional time consuming task in preparation of distracters.
- (iv) They put an emphasis on the whole while in an objective test we deal with a series of isolated bits.

#### Limitations of Essay Type Questions

(i) The most recurrent criticism of essay type questions is the lack of objectivity in evaluating the answers. There are many studies to show that in scoring such questions there are both inter-examiner and inter-examiner variability's.

- (ii) As not many long-answer questions can be asked in a question paper, the sampling of students achievement is small and spotty. The small sampling of content and objectives affects both the reliability and validity of testing.
- (iii) Evaluation of answers of long-answer questions is comparatively more time-consuming and expensive.

## Suggestions for Constructing Essay Type Questions

- (i) They should be set to test only those instructional objectives, preferably in the higher mental abilities, which are not easily tested by other forms.
- (ii) Questions should be framed in such a way that their meanings and scopes of answer are clear to the students.
- (iii) Directional words like "what do you know about?""Give and account of", "Write short notes on", etc.should be avoided as far as possible or should be clearly defined so as to avoid vagueness of answers.
- (iv) A definite marking scheme must be kept in mind while drafting an essay type question.

## (2) Short Answer Type Questions

A question, in response to which a student is expected to take 3-4 steps in solution, is usually called a short answer (S.A) type question. These types of questions are considered ideal for achievements testing since they take care of both content coverage and creative aspect of students.

## Advantages of Short Answer Type Questions

(i) Short answer questions can be framed so as to permit highly objective scoring. Although some of the answers will have subjectivity about them but in any case it is not as well marked as in essay type questions.

- (ii) They permit a wide sampling of content in a relatively short period of time. This advantage follows from the fact that each item is brief and the respondent does not have to write a long answer.
- (iii) They are easy to construct-in any case much easier than the objective-type questions.
- (iv) They provide a better measure of the capabilities of a student and in that way they may be said to be more valid than the objective type questions.
- (v) They eliminate the possibility of guessing which is a serious draw-back with objective-type questions.

## Limitations of Short Answer Type Questions

- (i) The nature of answers in short answer type questions is such that only subject experts can mark the papers.
- (ii) Scoring is not as completely objective as that of choice type of items.

## Suggestions for Constructing Short Answer Type Questions

- (i) Questions should be worded in such a way that it calls for a definite short answer.
- (ii) The directions to the questions must be explicit. Any kind of vagueness may lead to the question as a long answer question.
- (iii) Questions should be framed in such a way that their meanings and scopes of answers are clear to students.
- (iv) A definite marking scheme must be kept in mind. We know discuss fixed response type-questions;

# (3) Very short Answer Type Questions

A question in response to which a student is expected to give answer in a word or phrase is called a very short answer (V.S.A.) type question. The solution to such questions usually contains one or two steps. A very short answer type question in mathematics generally carries 1 mark and the student is expected to take 1 to 3 minutes to answer it.

Most often very short answer type questions are "fill in the blank" type questions and many times choices for the answers are given in brackets against each item. Sometimes, however, the choices are not given and the student is expected to supply the answer by recall. In such situations the answer to be supplied by the student must be unique. Example: The largest side of a right triangle is called......(hypotenuses, diagonal, attitude).

## Advantages if Very short Answer Type Questions

- (i) The greatest advantage of such type of questions is that content coverage is maximum.
- (ii) Scoring is highly objective.
- (iii) They are very easy to construct.

## Limitations of very short Answer Type Questions

- (i) Many times the nature of answers is such that only subject experts can mark
- (ii) the papers.
- (iii) Scoring is not as completely objective as that of choice type of items.

## Suggestions for constructing very short Answer Type Questions

- (i) In "Fill in the blank" type questions, omit only key words. The omission of too many words may change the task into a general intelligence test or a puzzle.
- (ii) When an answer is to be supplied by recall, it must be unique
- (iii) In case of choice answers being given, their number must" not exceed 3,

## **Objective Type Questions**

An objective type question is one in which alternative answer are given and the student is expected to indicate the correct answer by a tick mark or classification of a given a statement as true or false is required or a matching between corresponding statements of two given sets of statements is to be done. First kinds of objective type questions are called multiple choice type questions, the second kind as true-false type and the third kind as matching type.

# Matching type

Of these objective type questions, the multiple choice type questions are most favored by testers. They consist a statement, called the stem, followed by 4 or 5 choices of alternative answers, one of which is correct and the others wrong. The wrong choices are called distracters

**Example:** The point of intersection of the medians of a triangle is called

- A. Orthocentre
- B. Centroid
- C. Circumcentre
- D. Incentre

True-false type questions form a special type of multiple choice type questions having only two choices. Alternatively, a multiple-choice question may be regarded as a combination of a number of true-false items

**Example:** State whether the following statement is true:

"Each of the three angles of a triangle can have its measure less than 60° ".

Although quite different in appearance matching type test items are really a special form of multiple-choice items, as illustrated below, consists of several multiple choice questions, usually called premises and a list of alternative responses common ton all the premises.

Some statements are given in column and some items in column II.

Match those in column I with those in column II in the manner (i)-A, (ii)-B, etc.

Column I Column II

(i) Pair of numbers who's H.C.F. is 1.

A. Prime

(ii) A number which is divisible by 1 and the number I if.

B. Composite

(iii) A number, which is not divisible by 2.

C. Odd

D. Even

E. Cop rime

## Advantages of objective type questions

- (i) They permit highly objective scoring. Once a key had been worked out in advance and this is usually not a difficult problem scoring becomes a routine matter. Even clerks unfamiliar with the subject matter ca score the test uniformly.
- (ii) Scoring is rapid and easy. This follows from the simple manner in which responses have been recored and from the fact that a predetermined key can be routinely applied.
- (iii) Content coverage is very large in a relatively short period of time. This follows from the fact that it does not take much time in answering a test item.
- (iv) They lend themselves more rapidly to statistical analysis. Computers can be used affectively to draw various conclusions.

## Limitations of objective type questions

- (i) The greatest draw-back in objective type question is that they are very difficult to construct. It is well known that the validity and reliability of a test can be drastically reduced by carelessness or ignorance on the part of the examiner.
- (ii) They permit the student to resort to guessing. Some times a stem might not be properly worded and might give undesirable clues.
- (iii) A very important ability called creativity cannot be measured by them.
- (iv) Because of the recognition factor involved, the level of competency measured is very low.
- (v) They evoke wrong learning and teaching habits. Since the emphasis is an isolated facts, students will try to memorize isolated bits of information to

- the detriments of the learning of the subject as a whole. Organising ability is completely neglected.
- (vi) Objective type questions, specially multiple choice questions require more space, thereby increasing the cost of printing.
- (vii) They are amenable to the use of mal-practices more than other types of questions. Students can easily agree upon some code and communicate answers through signals.

## Suggestions for Constructing objective Type Questions About Stem

- (i) The stem may be in the form either of a direct question or of an incomplete statement. Pupils prefer the direct question because it defines a specific problem.
- (ii) If the incomplete statement form of the stem is used it should be meaningful in itself and imply a direct question rather than merely lead into a collection of unrelated true-false statements.
- (iii) If the incomplete statement form of the stem is used maintained. In other words, the stem together with any alternative answer must be a complete sentence.
- (iv) No part of the stem should occur after the alternative answers.
- (v) State the lead (stem) in positive terms, as a general rule. Negative statements tend to confuse the reader since most items usually ask for choice of the correct or best answer.

#### **About Choices**

(i) The destructors must be plausible so that the students, who do not know the correct answer, will tend to select them rather than the correct answer. The test maker can attain plausibility by making the destructors familiar, reasonable natural to the same concept as the correct answer.

One method of securing plausible destructors is to use the introductory statement as a completion test and tabulate the incorrect responses of the pupils. The incorrect responses that the given more frequently provide suitable destructors.

- (ii) The alternatives should be made similar. The length or precision of a statement of the alternatives should not very systematically with their correctness. Otherwise students may come learn that long destructors are usually the correct ones or vice versa. Generally all the alternatives should be of the same length.
- (iii) The alternatives should be written below the stem in a column, one below another The should not be listed in a paragraph.
- (iv) As far as possible five alternatives should be givens. If it is difficult to construct five without introducing absurdities, four alternatives may be given. The choice "none of the above" should not be encouraged unless it has plausibility.
- (v) Destructors must be such that they are not easily discarded by underachievers.

(vi) There must not be any clue to the correct answer either by words of the stem or by an alternative choice.

## About Matching type questions

- (i) We must be sure that the directions explain clearly the basis upon which the matching is to be done.
- (ii) The premises and responses in a singled matching item should be homogeneous i.e. each list should include homogeneous content.
- (iii) In general, relatively short lists of premises and responses should be used. Otherwise, it may be difficult to find lists of more than 5 or 6 premises or responses without losing their homogeneity.
- (iv) The premises and responses should be arranged for maximum clarity and conveniences of the students. Longer statements should be placed on the left as premises and responses should be arranged in a logical order if it exists.
- (v) Equal number of premises and responses should be used. There should be more responses than premises sod that a student cannot obtain a correct answer merely be elimination.

# About Trued-False Question

- (i) True-false items must be based on generalizations which are likely to be of use kin a wide variety of situations.
- (ii) Propositions or generalizations must be expressed in clear and simple language.
- (iii) Complex statements which unnecessarily combine several ideas must be avoided.
- (iv) False statements should not be created from true ones by inserting the word 'not'. It is always difficult and complex to judge the truth or falsity of such statements.
- (v) Textbook phraseology should be avoided because sheer memory of textbook words and phrases can give a clue for the correct answer.

#### : 133 :

## APPENDIX-7

# Orientation Programme for Senior NFE Functionaries of Voluntary Organisations from Bihar

Duration

13th Nov. 1999 to 17th Nov.1999

Venue

"Lokasevaytan," P.O. Neemdih

Dist-West Singhbhum-832401

Bihar

#### PROGRAMME SCHEDULE

Date: 13.11.1999

0830-0930 Registration

930-1100 Inaugural Session

Welcome (Secretary Lok Sevayatan)
About the Programme (Dr. P. Kumar)

- Inaugural Speech (Sh. Ishwar Chandra)

1130-1300 NFE and AS including highlights

of Ninth Five - year plan (Dr. P. Kumar)

1430-1900 Duties and responsibilities of Instructors, Supervisors and

project officers- Presentation and Discussion (Dr.P.Kumar)

Date: 14.11.1999

0830-0930 Presentation of the report of the work done on 13.11.99

0930-1100 Content areas (MLLS) for Primary Stage in language and

Mathematics (Resource Persons and Faculty)

1130-1300 Content areas (MLLS) for Primary Stage in EVS (Social

Studies and Science) (Resource Persons and Faculty)

# : 134 :

1430-1630	Teaching of language-objectives, methodology, actual teaching learning strategies and evaluation.  (Resource Persons and Faculty)
1700-1900	Teaching of Mathematics-objectives, methodology, actual teaching-learning strategies and evaluation.  (Resource Persons and Faculty)
Date: 15.11.1999	
0830-0930	Presentation of the report of the work done on 14.11.1999 its refinement
0930-1100	Teaching of Science-objectives, methodology actual teaching-learning strategies and evaluation (Resource Persons and Faculty)
1130-1300	Planning for teaching —demonstration in language and Mathematics at NFE center  (Resource Persons and Faculty)
1430-1630	Teaching of language – objectives, methodology, actual teaching learning strategies and evaluation.
	(Resource Person and Faculty)
17 00-1900	(Resource Person and Faculty)  Teaching of Mathematics - objectives, methodology, actual teaching learning strategies and evaluation.  (Resource Person and Faculty)
17 00-1900  Date: 16.11.99	Teaching of Mathematics - objectives, methodology, actual teaching learning strategies and evaluation.
Date: 16.11.99	Teaching of Mathematics - objectives, methodology, actual teaching learning strategies and evaluation.
Date: 16.11.99	Teaching of Mathematics - objectives, methodology, actual teaching learning strategies and evaluation.  (Resource Person and Faculty)  Presentation of the report of the work done on 15.11.99 and
Date: 16.11.99 0830-0930	Teaching of Mathematics - objectives, methodology, actual teaching learning strategies and evaluation.  (Resource Person and Faculty)  Presentation of the report of the work done on 15.11.99 and its refinement  Teaching of Social Studies- objectives, methodology, actual teaching-learning Strategies and evaluation
Date: 16.11.99 0830-0930 0930-1130	Teaching of Mathematics - objectives, methodology, actual teaching learning strategies and evaluation.  (Resource Person and Faculty)  Presentation of the report of the work done on 15.11.99 and its refinement  Teaching of Social Studies- objectives, methodology, actual teaching-learning Strategies and evaluation  (Resource Persons and Faculty)  Planning for teaching demonstration in Science and Social

## Date: 17.11.99

830-930	Presentation of the report of the work done on 16.11.99 and its refinement
0930-1100	Analysis of textual and other instructional materials in use- Presentation and group work (Resource Persons and Faculty)
1130-1300	Preparation of teaching aids in various disciplines (Resource Persons and Faculty)
1430-1600	Preparation of text-free test-items in various disciplines (Resource Persons and Faculty)
1600-1730	Valedictory session.

### परिशिष्ट - 8

बिहार प्रदेश के स्वैक्षिक संस्थाओं के अनौपचारिक शिक्षा में कार्यरत वरिष्ठ कार्यकर्ताओं का विषय-वस्तु पर आधारित उन्नमुखीकरण कार्यक्रम

स्थान :- ''लोकसेवायतन'' नीमडीह जिला- पश्चिमी सिंहभूम-832401 (बिहार) समयावधि- नवम्बर 13 से 17, 1999 तक

## प्रतिभागी सूची

- श्री अरूण कुमार वनवासी सेवा केन्द्र पो. अधौरा जिला. कैमूर (ममूजा) बिहार- 821116
- श्री बासूदेव मडल
   "घोघराडीह प्रखण्ड स्वराज्य विकाष संध"
   पो. जगतपुर, भाया- घोघराडीह
   जिला- मधूबनी-847402
- श्री हरेन्द्र
  ''मगघ विकाष लोक''
  पो0 कोसुत, भाया- मसौढी
  जिला-पटना, बिहार
- 4. श्री प्रकाश कुमार
  ''ग्राम स्वराज्य समिति''
  ग्रा0पो0 सलीमपुर, भाया-खूसरूपुर
  बिद्धारपुर
  पटना, बिहार
- डॉ0 आनन्द कुमार झा
   "भगवान पुस्तकालय"
   नया बाजार
   मागलपुर 812002
   (बिहार)
- 6. श्री उमेश प्रसाद
  ''कमलेश्वरी अन्तोदय आश्रम (मधेपुरा)
  ग्राम-पोखरसाम
  पो0 सलीमपुर, भाया-पन्डौल
  जिला मध्बनी, बिहार

- 7. श्री शशीभूषण कुमार ''लोकप्रभात' पोस्टमार्टम रोड जिला- नवादा-805110 बिहार
- श्री कमल प्रसाद कुवॅर
   "महाबीर सिंह मेमोरियल ट्रस्ट"
   पो0 बैइका, (विष्णुपुर)
   जिला- बधुबनी-847402
   बिहार
- श्री बिरेन्द्र बहादुर सिंह
  ''शीशु-नारी कला प्रशिक्षण संस्थान''
  ग्राम-पो0 समस्तीपुर
  बिहार
- 10. श्री अतुल प्रियदर्शी

  "स्वालम्बन शिक्षा केन्द्र"

  एम-2/30 श्री कृष्णापुरी

  पटना-800001

  बिहार
- 11. श्री कंचन कुमार घोष "टैगोर सोसायटी फार रूरल डभलपमेन्ट " खूदीराम बोस मार्ग कॉलकटा- 700006 पश्चिम बंगाल
- 12. श्री शूसेन महतो लोक सेवायतन ग्राम पो- नीमडीह जिला- पश्चिमी सिंह भूम-832401 बिहार
- 13. डॉ अखिलेश कुमार मिश्रा संथाल परगना अन्तोदय आश्रम पुरनदाहा देवघर-814112 बिहार

- 14. श्री एस.एस. रॉय संथाल परगना ग्रामोद्योग समिति वैद्यनाथ देवघर - 814112 बिहार
- 15. श्री राजदेव चौघरी जन-शिक्षण केन्द्र मु0पो0 चकाय जिला- जमुई-81303 बिहार
- श्री सतेन्द्र प्रसाद
  'अभियान'
  रामकृष्णा कॉलनी
  संदलपूर
  पो0 महेन्द्र
  जिला पटना-800006
  बिहार
- 17. श्री अरबिन्द कुमार बिनोबा आरोग्य एवं लोक शिक्षण केन्द्र मुOपोO- जयिकशन नगर भाया- इश्लामपुर जिO नालन्दा -801303 बिहार
- 18. श्री दिनेश चन्द्र सारण जिला समग्र विकास सेवा संस्थान मु0 दहियावा पो0 छपरा जि0 सारण-841301 बिहार
- 19. फ्रेन जेरी कुट्हीनों संजेवियर, चाईबासा संजेवियर हाई स्कूल पो0बैग-10 जि0- पश्चिमी सिंहभूम-833201 बिहार

- 20. श्री हरेन्द्र प्रसाद
  आभा क्रिश्चन सोसल वेलफेयर सोसायटी
  कैथलिक चर्च
  पो० चनपटिया
  जि0 पश्चिमी चम्पारण-845449
  बिहार
- 21. श्री संतोष कुमार
  "ग्राम भारती सर्वोदय आश्रम"
  पो0- सिमुलतला
  जि0- जमुई-811316
- 22. श्री सुरेश कुमार शक्ति बनवासी विकास आश्रम पो-लटमा भया- बगोदर जि0- गीरीडीह-825322 बिहार
- 23. श्री श्यामजी रॉव झरियां महिला विकास केन्द्र ऑगन बाडी भवन, 'नई दुनिया' जि0- धनबाद-828111 बिहार
- 24. श्री अखिलेश कुमार तिवारी पर्डित लोकशाला मु0पो0-जगदीशपुर भाया-मधुपुर जि0-देवधर-815353 बिहारं
- 25. श्री धमेन्द्र कुमार शर्मा
  "पर्डित" "लोकशाला"
  मु0 पो0- जगदीशपुर
  भाया- मधुपुर
  जि0- देवघर-815353

- 26. मु0 मुबारक हुसैन शमा विकास समिति अन्सार नगर, मल्लाह विघा पो0- इस्लामपुर जि0- नालन्दा-801303 बिहार
- 27. श्री रजनीश कुमार बिहार ग्रामीण महिला कल्याण परिषद मु0- फतेहपुर पो0 सुहीर्द नगर जिला- बेगूसराय बिहार
- 28. श्री बृजनन्दन प्रसाद ग्राम स्वराज्य आश्रम लोकयात्रा धाम मु0- धमौली पो0 वेना जिला- नालन्दा-803110 बिहार
- 29. स्वामी राजेश्वर राय जे.पी. सरैसा सेवा आश्रम कउआ चौक पो0 जोरपुरा जिला- समस्तीपुर-848504 बिहार
- 30. श्री महाबीर प्रसाद महतो प्रखण्ड लोक विकास समिति मधेपुर मु0पो0- पाचही जि0 मधुबनी-847408
- 31. श्री सुरेन्द्र प्रसाद सिंह समाजिक विकास संस्थान मु0पो0-तमुरिया

- 32. श्री तनिक शर्मा

  ''बिहार प्रदेश भारत सेवक समाज''

  नेहरू भवन

  दारेगा प्रसाद राय पथ

  पटना , बिहार33.
- 33. श्री सदन कुमार सिंह
  "गाँधी सेवा आश्रम "
  जलालपुर बाजार
  जि0 सारण
  बिहार
- 34. श्री अनुप कुमार सिन्हा
  ''नवभारत जागृति केन्द्र''
  अमृत नगर
  पो0 बॉक्स संख्या 37
  पो0 कोररा
  जिला- हजारीबाग- 825301
- 35. श्री रंजित कुमार गया नाजरथ एकाडमी यूनिट- चेतनालय पो0 राजगीर जि0 नालन्दा-803116 बिहार
- 36. श्री ब्रहमानन्द पाठक रॉची जिला बनवासी खादीग्रामोद्योग विकास संस्थान आर्यपुरी, रातू रोड रॉची-834001 बिहार

## संसाधन व्यक्ति

- श्री निकुंज प्रकाश नारायण
  उप-सचिव सह परामर्शी
  अनौपचारिक शिक्षा, राज्य संसाधन केन्द्र
  पटना (बिहार)
- श्री संजय कुमार सहायक निदेशक जन-शिक्षा बिहार सरकार पटना
- श्री चन्दन सेन अध्यक्ष 'लोकसेवायतन' पो.- नीमडीह, जिला- प. सिंहभूम (बिहार)
- श्री ईश्वर चन्द्र
   (प्रयक्ता सलेक्शन ग्रेड)
   अनौपचारिक एवं वैकल्पिक विद्यालयी शिक्षा विभाग एन.सी.ई.आर.टी नई दिल्ली-110016

## विशेष अतिथी

श्री प्रसाददास गुप्ता परियोजना समन्यवक एम.एन.बी.ई. संस्थान पो. माझीहीरा, जिला-पुरूलिया (प. बंगाल)

## कार्यक्रम समन्यवक

डाँ० पुरूषोत्तम मुमार

प्रवक्ता अनौपसचारिक एवं वैकल्पिक विद्यालयी शिक्षा विभाग एन.सी. ई.आर.टी. नई दिल्ली-110016

## शिक्षण- क्रम निदेशक

श्री दीपॉकर राय 'लोकसेवायतन' पो0 नीमडीह जि0 पश्चिमी सिंहभूम बिहार

And he succeeded, for, though On the Nature of Things is a didactic poem of six books expounding in the most technical language of the day a philosophic, or as we should say now a scientific, view of the world, no rationalist street-corner orator could exhibit greater ardour, no nature-mystic more penetrating feeling for the mysterious and majestic workings of material nature. For Lucretius was afire with the hopes excited by his prophet, Epicurus - When before the eyes of men Human Life lay still upon the ground, prostrate in foul dejection, crushed and buildened with the dead weight of Religion, which put forth her head from the heavenly places and with the terror of her countenance lowered upon mortal men and brooded over them then it was that a man of Greece first had the courage to lift up his eyes - the eyes of a mortal - to meet her eves and to be the first to withstand her to the face. This man neither stories about the gods nor the gods' lightnings nor heaven with its threats and its thunder could keep within bounds: they only spurred the more his mind's searching courage to long to be the first to splinter the bars that lock the gates of Nature's world. Therefore his mind's violent energy carried through to victory; he passed far beyond the flaming ramparts of the universe and ranged in mind and spirit through the unmeasured whole. Thence bringing his spoils in triumph he comes back to tell us what things can come into being, what things cannot - in short, what is the principle by which each thing's potentialities are marked out, its boundary stone set deep down within itself. That is how in her turn Religion is overthrown and trampled down underfoot; this man's victory puts us on a level with heaven.'

Such is Lucretius' debt to Epicurus. Briefly, Epicureanism was derived from the atomic determinism of

Democritus. The universe is the result of chance agglomerations of atoms, which vary in size and shape and fall through space. As they fall, they are liable to swerve - why is not clear - and to collide and to form combinations, and so the world has variety, and law is not rigid, and man is subject to predetermining causes over which he has no control. All things are made of matter, even the soul, though matter varies in degree of 'thinness'; matter can come apait into atoms, which alone are indestructible, therefore all may perish except atoms and the bodies of the gods which reside in the empty spaces between the universes and so can collide with nothing and so are immortal. If everything is material, ideas and impressions of the senses - sight, for example - are material; they arise because things throw off husks of atoms, as it were, which strike the sense organs of the mind itself. Thus, the gods really exist, for we have an idea of them; they are happy and care nothing for the happiness of man, whom they did not even create. Man may revere the gods and expose himself to their emanations and so perhaps gain something of their qualities; contemplation, therefore, may confer some benefits. But the gods do not willingly or consciously influence men. Man's goal is happiness - not over-indulgence in pleasure, for this may bring pain, calm of body and of mind is the aim. Above all, get rid of fears, fear of death and the displeasure of the gods, death is unconsciousness; the displeasure of the gods is a myth.

And so the poem expounds the implication of this doctrine for human knowledge and human life, and ranges far and wide Here are the topics of the fifth book: the nature of the world and mortality; the formation of the world; the motions of the heavenly bodies; vegetation and animals and their origin; the extinction

of animals in the struggle for existence, primitive man; early civilisation; origin of speech; discovery of fire; beginnings of political life and of religion, discovery of metals; early war; invention of music; civilisation as a whole. The scientific theory is developed with an ingenuity and a conviction which carry us along; it is nothing if not thorough. For example, seventeen reasons are given why the soul must perish with the body, and the conclusion of the matter begins thus:

'Death therefore to us is nothing, and concerns us not one whit, since the nature of the mind is proved to be mortal. Just as we ourselves felt no pain in days now past, when the Carthaginians gathered against us from all sides to engage in battle and all things were shaken in war's fearful confusion and trembled in terror beneath the high confines of the heavens, when men wondered which of the two nations it would be to whose empire all human kind by sea and by land would fall so too in the days to come when we shall be no more. when the body and the soul, from whose union we are fused into single beings, are put asunder, then beyond cavil to us who shall be no more nothing at all can happen, nothing can arouse sensation, no, not even if the earth be confounded with the sea and the sea with the heavens.'

But the passages which compel the utmost admination are those in which imaginative insight describes the workings of nature, and the life of man in his earliest days. Lucietius had little in the way of anthropological data, no tribes to observe at first hand, no collection of fossils or implements, no cave-drawings. Yet his pictures are astonishingly vivid and, judged by modern theories, correct. Again, his observation of nature is careful of detail and searching and sympathetic; his delineation of types of human character and emotion and motive is

sure and convincing. In such passages as these the Latin hexameter verse rose to new heights and was not surpassed.

The poem stands remote and unique. Epicureanism had no great following in Rome; Vergil and Horace played with it and gave it up. Lucretius had no sectaries to whom to preach, no predecessors to show him the way, no posterity of readers to admire him as a philosopher, he was merely a poet whose genius bent to its will a most intractable theme. With all his passionate materialism Lucretius protests not so much against religion as against the forms of religion which were gaining influence in Rome. He has been accused of exaggerating the religious crudity against which he inveighs - reliance on dreams, and magical rites, and sacrifices. and charms, and rank superstition. Did Lucretius exaggerate their place in Roman religion? Certainly, if he had thought only of Roman religion; but he thought also, and probably first, of those Eastern practices which in his time were securing a firmer hold upon Roman sentiment. It was not the gods, nor indeed an outlook upon life which admitted its marvels and mystery. against which Lucretius protested. what drove him almost to madness was man's self-inflicted and degrading enslavement to crude and terrifying superstitions which a few moments of clear reasoning would dissipate into nothingness. 'The life of fools in the end becomes a hell upon earth.' With the breathless fervour of a religious convert he attacked in the name of reason the irreligion of religion.

If Epicureanism had not a great following at Rome, the reverse is true of Stoicism, for the Romans were natural Stoics long before they heard of Stoicism. The founder of Stoicism was Zeno (350–260 B.C.) of Citium, who lived and taught at Athens. Stoicism looked back

upon the field of Greek philosophy and was in contact with philosophical ideas which emanated from the East. Its adherents engaged with most of the problems hitherto raised by philosophical speculation - metaphysical. physical, psychological, ethical, logical, political - and they spread their teaching far and wide over the Eastern Mediterranean. But Roman Stoicism was very different. No Roman adopted the whole of any philosophy; some parts did not interest him, other parts he adapted to his own instinctive beliefs and found in them a statement of what he had never clearly articulated for himself. It may be perhaps an exaggeration to say that the Roman adopted only what suited his Roman ideals, for undoubtedly philosophical studies did influence the conduct and outlook of many. But certainly the Roman was not greatly interested in the coherence of a system, or in pursuing the fundamental questions of metaphysics. He was interested primarily in action and its springs and justification. Hence Roman philosophy is largely celectic, and it is concerned chiefly with morals.

We hear that in 155 B.C. Athens sent an embassy to Rome and that it included the leading exponent of each of the three schools of philosophy, the Stoic, the Peripatetic (successors of Aristotle), the Academic (successors of Plato) Enormous audiences listened Very soon afterwards Panaetius of Rhodes (died about 109 B.C.) visited Rome, and became a close friend of Scipio Aemilianus and of his literary friends, Polybius and the rest. Panaetius himself greatly modified Stoic doctrine, doubtless to suit the Roman character. Later still Poseidonius taught in Rhodes, Cicero visited him there in 78 B.C. and clearly was greatly in his debt.

Estimates of Cicero as a philosophical writer have varied. Certainly his influence on European thought and letters has been profound, at some epochs greater

than that of Plato or Austotle. At the present moment he is derided as a mere middle-man of no great intelligence. In modest depreciation of his philosophical works he once wrote in a letter to Atticus, 'they are copies and therefore cost less trouble; I supply only the words, and I don't lack those!', and he is now taken at his word. In one sense he was right, but in supplying the words he rendered an incalculable service to European thought and letters. He moulded the Latin language into such form that it became supple enough and clear enough to put within the reach of any intelligent man not only the philosophical ideas with which his age was ramiliar, but also those ideas which were yet to be created by Christian thought and controversy and by European science and learning in every field. Moreover, even if Cicero's works are derivative, they select what they derive and present it in such form that there is probably no better introduction to moral philosophy - not excepting Plato himself. Of originality there is none - except in style, language and presentation; but century after century learned its philosophical grammar from these works and they are still invaluable. Here are some of the titles: On the State, an imaginary discussion between Scipio Aemilianus and his friends, and surviving only in mutilated form; On the Laws, a discussion between Cicero. Atticus and Ouintus Cicero; On the Ends of Good and Evil, another discussion in which Epicurean, Stoic and Academic views are stated and criticised; The Tusculan Disputations; On the Nature of the Gods; On Old Age (Scipio and Laelius visit Cato and listen to his wisdom); On Friendship; On Duties. These are some of the titles of what are commonly called his philosophical works many of them are essays and musings and rambles enlivened by anecdote rather than set and methodical treatises. Throughout these writings Stoicism finds explicit and incidental treatment; thus in the Academica a general view of Zeno's teaching is given, in In the Nature of the Gods (Book ii) Stoic physics is treated, in On the Ends (Book iii) Stoic ethics.

Before speaking of the teachings of Stoicism, we may glance briefly at three of its later exponents. Of Seneca's public career, of his life at the court of Nero. of his wealth, and his death as an alleged conspirator against the life of Nero, we must say nothing; nor can we review the estimates of him made by modern critics. some of whom loathe him as the supreme embodiment of a nauseating hypocrisy, while others regard him as a saint - 'this pagan monk, this idealist, who would have been at home with St Jerome or Thomas à Kempis', who felt an 'evangelistic passion, almost approaching St Paul's, to open to these sick perishing souls the vision of a higher life through the practical discipline of philosophy'. The best thing to do is to take his works as they stand and judge them on their merits. There are several treatises with such titles as On Providence, dealing with the age-long question why the good suffer; they do not suffer, says Seneca, in the ways that really matter; On Anger: On the Life of Happiness; On Tranquillity of Mind; On Mercy, addressed to Nero and the source of some of Shakespeare's ideas in Portia's great speech; On Kindness. Besides this he wrote (a) the Natural Questions, which, if of no value scientifically, has some excellent descriptions of natural phenomena, (b) tragedies, of great influence in European tragedy, and (c) letters to Lucilius. The letters, which are a hundred and twentyfour in number, are musings or meditations or essays upon 'serious subjects' rather than letters; sometimes they start with an anecdote or some real happening to Seneca or Lucilius, and it is not long before the sermon follows.

Here are some samples:

'All you write to me and all I hear leads me to have high hopes of you; you don't rush about or disturb yourself by moving from one place to another. All that knocking about is the sign of a sick mind; the first proof of a composed mind is that it can stay still and linger with itself Be sure, too, that reading many authors and reading books of every type does not argue some quality of restlessness and instability There are certain works of genius on which you ought to linger and nourish yourself if you want to take away from them something which will settle down faithfully in your mind. The man who is everywhere is nowhere. Those who spend their lives travelling about end by having many acquaintances to stay with but no real friends. The same is bound to happen if you do not attach yourself with real intimate knowledge to some one man of genius, but hurriedly scamper over everything at breakneck speed. Nothing does such haim to health as perpetual change of remedy, no wound comes to a scar if new kinds of dressings are frequently tried, and a plant never grows strong which is often transplanted. Nothing is so beneficial that it can profit you as it passes by. A multitude of books distracts the mind; since you cannot read the books you have. it is enough to have what you can read ...' And so on.

"... There is no need to lift your hands to Heaven, no need to get round a temple-keeper to admit you close to the ears of the statue in the belief that you can make sure your petitions are heard: God is close beside you, he is with you, he is within you. I assure you, Lucilius, the sacred breath (which animates the Universe) resides within us, watching and guarding the good and the evil in us; as we treat it, so it treats us. No one is a good man apart from God. Can anyone rise above fortune without God's aid? It is he who grants us counsel which

makes us great, and counsel which is upright. In every good man God dwells, though we know not what god. Suppose you come across a thick wood of old trees, unusually lofty, shutting out the sky with their dense interlacing branches; the height of the wood, the hidden loneliness, the awe-inspiring shadows, heavy and unbroken when all around is open, make you believe in a divine being. A cave eaten deep into the rocky side of the mountain frowning over it, a cave not made with hands but hollowed out by nature's causes into its roomy measurements, will send a stab of religious awe through your heart. ... Suppose now you see a man unaffrighted by danger, untouched by desires, happy in adversity, calm in the midst of storm, looking upon men from a higher level, and upon gods from an equality, will not a feeling of veneration for him fill your mind? Will you not say "This is too great and exalted a thing for me to suppose it of the same order as this little bodily frame in which it is"? A divine power has descended into it; this pic-eminent mind, so controlled, passing lightly over all things in the knowledge that they are of less worth, laughing at our fears and our hopes, surely it is possessed by power from heaven; so great a thing cannot stand so firm without support that is divine. It lives - with that part of it which is greatest - in the heaven from which it descended.'

Very different from Seneca is Epictetus – a slave of Nero, later freed and eventually driven from Rome with other philosophers. He settled at Nicopolis in Epirus where in poverty and physical infirmity he lectured. He is said to have been a close friend of Hadrian, the Emperor; notes from his lectures have been preserved to us by Arrian. His was a deeply religious mind unsupported by any conviction of personal immortality. He was content to do the will of God in this world and

to look no further. The burning intensity of his behefs is expressed in violent and passionate language: ironical, pungent, epigrammatic, he shoots out questions which search into the hearts of his audience, or else he issues his indignant decrees. He must have been a lively lecturer.

From the ex-slave in his lecture room indignantly arraigning his motley audience we move to the tent of the Emperor Marcus Aurelius at Carnuntum, in Pannonia, where all unwillingly he shouldered his duty to turn himself from a meditative student into the commander of an army defending the Northern frontier of the Roman Empire. And conscientiously and successfully he did it. But at times he withdrew into himself: and, as he fought with some of his problems in the melancholy places of his mind, he jotted down his musing and wrestlings and resolutions, and by some queer accident his jottings have come down to us. Some critics account To Himself - for such is the title of his meditations - as one of the world's great books; others see in it merely the morbid haverings of a priggish mind torturing itself by its own introspective irresolution. There are twelve books which will enable the reader to decide for himself, and here are two samples:

'Nothing is so productive of greatness of mind as the power to examine methodically and honestly all the things that befall us in life and to examine them, as they occur, in such way as to form an estimate of the kind of universe to which they belong, of the purpose which they fulfil in it, of their value in relation to the whole and in relation to man, who is a citizen of the highest State, of which all other states are, as it were, households: what each really is and what it is composed of and how long, judged by its own nature, it is likely to last – I mean, I should form this estimate of what now

at this very moment is presented to my consciousness. And I should ask what virtue I should employ to meet it with, as for example gentleness, courage, truth, confidence, simple naiveté, independence.'

'What is it you complain of? Man's wickedness? Ponder this judgement – rational creatures have been created for one another, and forbearance is part of justice; it is all unwillingly that men sin; think how many people after a life of bitter hostility, suspicion, hatred, and skirmishing with one another have been laid out in death and been burnt to ashes – think of this and then at last stop your complaints. Do you complain of the portion assigned to you out of the whole sum of things? Recall again the alternative "Either Providence or Atoms', and all the proofs that the Universe is a kind of State.'

Roman Stoicism is an attitude to life based on a few fundamental ideas variously expressed. It is not necessarily a religion, though it may take a strongly religious form. it is not a philosophical system, for the Roman exponents of it laid little stress on this aspect and express points of view which are not easily reconcilable. Nor is it a body of carefully enunciated ethical doctrine. Still less is it a mere reflection of Greek Stoicism; for, in this as in most other things, the Romans put their own imprint on what they 'borrowed'. Stoicism is the result of the contact of Eastern influences upon classical thought. The Platonic and Aristotelian schools broke up into many fragments, concerned not with the fundamental notions which had engaged their founders (for no genius arose to deal with those), but with subsidiary matters left over when the great problems were excepted. Thus, philosophy was increasingly occupied with the immediate problems of the daily behaviour of the ordinary man and not with the deeper questions

upon which, in the mind of the thinker, the bases of all behaviour should logically rest. Now the tendency of the East had been to base morality, not upon a philosophical justification, but upon the authority of the prophet or seer whose intuition or moral sensitiveness seemed to carry its own credential. Thus Stoicism, and particularly Roman Stoicism, paid little attention to a basic philosophy and built up a large body of precept. Though reference was made to one or two fundamental postulates, what really carried authority was the example or the teaching of the Stoic 'wise man' or sage (sapiens), the man who possessed the Stoic insight into the canons of moral behaviour. 'What will the "sage" do in such and such circumstances?' is the Stoic criterion, whereas the earlier Greek question was 'How am I to discover by an intellectual process what is right and therefore what is right in this particular case?'

It would be unprofitable to set out the slender teachings on physics and logic and psychology with which the Stoic made play, or to expose their inconsistencies. It must be enough to say that to them the important thing for man was that 'he should live according to Nature', and Nature was that Force or Providence or Reason or Fate which ordains that things shall be as they are Sometimes it was spoken of as God, sometimes God was equated with Nature and Stoicism became Pantheism. Man's hope of happiness lies in subordination to this all-pervading and life-sustaining Power. (The reader who remembers what was said about 'subordination' in the first chapter will see why Stoicism particularly appealed to the Romans; and, if he also remembers their tendency to canonise their national heroes, and particularly Cato, he will not be surprised at the authority of the 'sage'.) The gods of popular mythology are held to be the popular version of this

Universal Reason, and Reason in this context means vital principle rather than anything purely intellectual. The oneness of this principle has its implications - the unity of mankind and the brotherhood of man, and the potential equality of men, and from these ideas inferences may be drawn about nationality and politics. On the problems which may occur to the ordinary man, such as God, immortality, free-will and death, Stoicism vacillated; sometimes God is Fate, sometimes a personal and loving deity; sometimes man is a spark of the Divine, sometimes a speck of dust, sometimes the soul is immortal, sometimes it is consumed at the final conflagration, sometimes life must be drunk to its bitter dregs, sometimes suicide is extolled. Yet upon these insecure doubts a noble ethical ideal is built. Neither trouble not tribulation distress the sage. He is superior to riches and poverty, to opinion critical and friendly, he does all for conscience' sake. He is kind to friends and to enemies merciful, and his forgiveness outstrips request for it His neighbours, whether in city or state or the world, he respects, and he does nothing to reduce their liberty. He will depart this world with the consciousness that in independence of spirit he has borne alike its joys and its sorrows and that death holds no terrors. Such was precept. in fact, the result was that, at the best, the sage tended to isolate himself from the world despite many protestations that he should take part in its activities; at the worst, he planted himself on a pinnacle of smug self-complacency and contempt of his fellows. In the first century, owing to causes into which we cannot go, Stoicism generally implied opposition to the Emperor: in the second century Emperors were themselves Stoic in sympathy and outlook.

As an answer to the urgent moral and religious hunger of the times Stoicism failed. It offered no grounds of

belief and attempted to tread a hazardous tight-rope of suspended judgement. It offered a noble ideal, but no reason for enthusiasm, no motive of affection or sympathy. It demanded that a man should save himself by his own resources, in calm detachment, ignoring the desperate cries of a world protesting that salvation was not contained within it. To the sage all was easy, but how to become a sage? and no clue was forthcoming. A few might achieve an ethical integrity based upon no sanctions and find satisfaction in their sad and melancholy resignation; there was nothing for people of vigorously pulsing life, with a measureless capacity for good and evil, and with energy and strong hate and love, anxiously seeking help wherever they thought they could find it - in astrology and magic, in the ritual and lustrations and promises of alien cults, in popular nostrums and secret supersitions. And so the multitude despised the Stoic philosopher for his barren gospel.

But historically Stoicism has been a powerful influence, and it must not be underrated. Three points may be made.

First, the extraordinary closeness of very many precepts of Scneca to passages in the New Testament is evidence of the high level of morality of which the Stoic doctrine was capable. Many authors have set out in parallel columns passages from each source bearing close kinship in form and sentiment. 'Cast from you whatsoever things rend your heart: and if you could not extract them otherwise, you should have plucked out your very heart with them.' 'Love cannot be mingled with fear.' 'That gift is far more welcome which is given with a ready hand than that which is given with a full hand.' 'Let us so give as we should wish to receive.' Tertullian calls Seneca 'often our own', St Jerome 'our own Seneca', and in the fifth century letters between St

Paul and Seneca were forged to account for the resemblances of thought and expression. Modern criticism accounts for them in other ways. But the influence of the writings of Seneca and Marcus Aurelius has been very great, Montaigne, for example, owes a great deal to them. For they seemed to offer a noble ethic free from the unacceptable dogmas of religion; forms of Stoicism under other names survive today.

Secondly, the influence of Stoicism on law was profound. Many of the best educated and most thoughtful Romans were Stoics, and many were also lawyers. The 'civil law' of Rome, i e. the law operating among citizens had gradually been broadened as the Romans came in contact with other nations possessing their own systems of law and custom; resemblances attracted attention and suggested that there might be some common basis of common notions upon which a wider law might operate, to the advantage of an Empire which was always drawing closer. Hence came the idea of a 'law of nations'. But the Stoics had yet a wider idea, their ideal was 'to live according to Nature', and Nature had a code of laws of which the philosopher could catch a glimpse. 'Natural law', it was thought, might eventually be recovered, but in the meantime the 'law of nations' was a shadowy copy of it. And so the lawyers and Stoic Emperors, in their interpretation of law rather than in new enactments, brought the law into closer touch with what they conceived to be 'natural law'; and thus the idea of 'natural law' was started upon its long history in European thought.

Thirdly, the Stoic notion of the brotherhood of man had great influence upon the treatment of slaves. We have already seen that slavery was mitigated under the early Empire, and indeed might carry, in special circumstances, positive advantages; to this change the influence of Stoicism contributed much. The xlviith letter of Seneca deals with the attitude which a Stoic master should adopt towards his slaves.

In the Greco-Roman civilisation of the Empire there were many other philosophies which a man might adopt - the Cynic, the neo-Platonist, besides adaptations of Platonism and Scepticism and amalgamations of many others. Their study is of great value, Plotinus, the greatest of the neo-Platonists, is of absorbing interest both in himself and in his influence. But they are outside our scope; for we are considering the Romans, and the specifically Roman philosophy was Stoicism.

#### CHAPTER VIII

# THE AGE OF CRISIS AND RESCUE, DIOCLETIAN AND CONSTANTINE

To this most blessed age of our Lords C Aurelius Valerius Diocletianus Pius Felix, Unconquered, Augustus, and Marcus Aurelius Valerius Maximianus Pius Felix, Unconquered, Augustus, and M Flavius Valerius Constantius and C. Galerius Valerius Maximianus, most noble Caesars and consuls, by whose virtue and foreseeing care all is being reshaped for the better.

## FROM AN INSCRIPTION ON A COLONNADE DEDICATED IN NORTH AFRICA

To our Lord, the restorer of the human race, extender of the Empire and of Roman dominion, founder of everlasting security, Flavius Valerius Constantinus, Fortunate, Mighty, Pious, ever Augustus, son of the deified Constantius, always and everywhere venerable.

FROM AN INSCRIPTION POUND IN ROME

In general, the first two centuries of the Empire were centuries of peaceful development; in them was done the work of romanising the West. Some historians have pointed out that the Antonine Age was in a sense too peaceful; they have seen it as an Age of static self-complacency, in which the original impetus lost momentum till stagnation set in. No Age is really static; if men do not proclaim what it is they are trying to do in such clear tones that the historian can hear, it does not follow that they are not aiming at something, though they may be aiming at different things and may not succeed in realising any of them till later. Looking back from the vantage point of a later Age, the historian may be able to see what ideas, due to positive or negative causes, were influencing men. By their fruits he may infer the seeds which were germinating, though the men of the day were scarcely aware of them, or underestimated their vitality.

The fourth century will present a picture very strange to one familiar only with the first and second centuries; for the Empire had passed through the anarchy and the confused ambitions of the third century and was transformed; indeed, only by the most desperate efforts of Diocletian and Constantine was it held together at all. In the light of the changes it is possible to see something of the weaknesses of the golden Antonine Age.

If so complex a period as the third century, so deficient too in good historical witness, admits of any simple clues, perhaps they may be found, first, in the movement of power and wealth and vigour away from Rome and Italy to the provinces, secondly, in the ever-growing pressure upon the frontier provinces exerted by 'barbarian' tribes. To some extent, but not wholly, these aspects of the question are related. Clearly, threat to the frontiers thrusts into prominence the importance of the frontier provinces. But apart from this the provinces had grown in wealth and power and significance. During the early centuries Rome and Italy had been the centre from which radiated Roman civilisation; as that civilisation was appropriated by the provinces, they became more self-reliant from many points of view - economic, military, intellectual and even political. The new importance of the provinces at the expense of Rome and Italy was the measure of Rome's success: but her success was fraught with disaster for herself

The factors which contributed to the turmoil and confusion of the third century were complex, and no attempt to show them at work can be made here; nor indeed is it easy to give one priority or precedence over another; they acted and reacted upon one another. In general terms they were as follows.

In the early days of the Republic the army had been recruited from Rome; then Italy was drawn upon, then

the western provinces, Spain and Gaul. As the frontiers receded, local levies supplied more and better soldiers, the auxiliaries became more important. By the third century A.D. the army was drawn from the very tribes which it had once been the business of the army to hold in check - Germans, Moors, tribes from the Danube and from Illyria and Dalmatia. These men were scarcely romanised; their local sympathies were Stationed often for long periods in one province they looked at the Empire from the standpoint of their own country or province, if indeed they did not tend to identify the Empire with their own neighbourhood. They had less to give to the people in whose country they might be stationed; they tended to be an alien element aloof from the inhabitants; sometimes they were mere soldiers of fortune entering Rome's service. As the barbarian threat to their particular province increased, they became aware of their power, if their resistance to that threat was successful. A victorious army in one province might easily become jealous of its counterpart in another; rivalries grew, generals were turned into pretenders for the Empire; the soldiers made and unmade Emperors; civil wars, fought for no principle or ideal raged for long years and squandered the strength of the whole Empire. The Emperor who emerged successful rested his power and his safety upon a military despotism, pampering the armies, raising their pay and gratuities, rewarding them with lands and suffering their petty tyranny over the civil population. 'Appease the soldiers or perish' was the imperial motto. And, as the army increasingly became more barbarised, so were the generals and pretenders whom they nominated, Africans, Thracians, Dalmatians, a Syrian, an Arab, all wore the imperial purple of Rome; many were untutored, many scarcely set foot in Rome, few

understood what they had inherited. Roman-ness (Romanitas) was sadly diluted.

For at all costs the army must be increased, till by the end of the fourth century it was double the size of the army of Augustus. New systems of defence, which relied no longer on the fighting line of the frontier, but upon successive points of consolidation arranged in depth, new arms, new specialist corps were demanded. For the pressure from beyond the Empire was constant and severe, and it operated at many points at once. The garrison of the province was no longer adequate, its value presupposed spasmodic and isolated attack, whereas, as pressure was intensified, a mobile striking force was required to be sent at speed to the point most threatened. The earlier policy of buying off barbarian hordes by regular subsidies, at first successful, failed as the Empire grew obviously weaker, the settling of marauding tribes inside the frontier, tried by Marcus Aurelius, for example, only made the desences less assured. And so one race was succeeded by others in growing numbers; the Carpi raided Dacia and were followed by Goths, till Dacia was surrendered and a Roman province became their home. The Goths over a long series of years drove into East Germany, Transylvania, Illyricum, and raided by sea the whole of Asia Minor, and penetrated as far into Greece as Athens and Sparta. The Juthungi reached North Italy, the Alemanni, who first appear about A.D. 210, thrust into Gaul and Italy, and for a moment appeared before Rome. Meantime, the Persian power had revived and was often victorious over the Roman armies sent to resist its depredations. The Impenal Government was struggling for survival and it could not meet the manifold threats. It is not to be wondered, therefore, that separate parts of the Empire took independent steps to save themselves, setting up states and armies of their own and defying the central government. Such were the so-called Gallic Empire, and the state of Palmyra under Queen Zenobia, who even conquered Egypt and for a short time held the chief granary of Rome in her power. Meantime, the invading hordes plundered and burnt and slew; they carried off a vast treasure of gold and precious objects, and the Empire sank into poverty. And, as happens, they often assimilated the civilisation of their victims, and during these troubled years Germans and Romans drew nearer to one another in habits and culture and outlook, and the beginnings of the German-Roman states took shape.

The centre of gravity was moving east. Where the Emperor was, there was Rome, and he was most often east of the Adriatic sea. The Balkan Peninsula was the last to be romanised, and was most vitally conscious of its Roman-ness, whatever its interpretation might be. It furnished the most vigorous troops, and the troops created their generals, and from its generals came Emperors. The East with its inherited wealth and longer tradition of civilisation inevitably exercised its influence; imperial autocracy drew upon the age-long experience of Eastern monarchy; and in face of the menace of invasion Rome was no longer strategically suitable as a headquarters of a government, now military above all else. Italy was fast becoming a province rather than a land privileged as the cradle of Rome.

The economic effects of civil war, anarchy, disintegration, devastation of land and city by invading hordes were incalculable. Already in the Antonine Age there were ominous symptoms. The once flourishing cities of the provinces found it harder to meet their expenses; imperial taxes increased; the local councillors found office increasingly a burden, for larger calls were made on their pockets. The value of money declined, industry satisfied local needs and found no incentive to distribute more widely; production failed to see the kind of goods that were needed, and remained stagnant. With war and invasion capital was destroyed, taxes were ground out of town and countryside to pay for the war; when money was not forthcoming, goods were seized, particularly those which would supply the needs of the armies. Lands went out of cultivation for lack of labour; the hardest and least pleasant forms of work were avoided: yet the army must have supplies. Ships were impressed to carry those supplies; the civilian population was a secondary matter; the standard of living declined as imports were confined to military necessities and inflation brought its attendant evils. Yet still, though the Empire starved, the armies must be fed and armed and clothed and transported.

It is difficult in a few words to paint the picture in dark enough colours. The Empire was within an ace of falling apart and settling down in utter collapse in poverty and famine and ruin. 'Shall I marry? Am I to be sold up? Shall I have to be a member of the local Council? Shall I get my salary? Shall I quit?' These are questions put by bewildered folk to an oracle in Egypt, and preserved to us on papyri. Trivial, but eloquent of the ordinary man's state of mind. A petition to the Emperor sent from Asia Minor reads. We are most atrociously oppressed and squeezed by those whose duty it is to protect the people ... Officers, soldiers, city magistrates and imperial agents come to our village and take us away from our work and requisition our oxen; they exact what is not due and we suffer outrageous iniustice and extortion.'

Yet the Empire as a single whole was saved as by a miracle. It was saved by the exertions of two men; but

It was saved at the most appalling price, so appalling that historians have sometimes asked whether it had not better perished. These two men were Diocletian and Constantine. Diocletian, Emperor A.D. 284–305, of Illyrian birth, was the son of a freedman; he served in the army and was elevated to the throne by the officers. Constantine, Emperor A.D. 306–337, was also an Illyrian, the natural son of Constantius and Helena; he too was nominated Emperor by the soldiers, and had to fight for the throne. Both men were able organisers.

The measures of Diocletian, completed by Constantine, contained little that was really new, and no attempt will be made here to show the process of development. They regularised and systematised the precedents and practices of the years of stress, when the Empire was in a state of siege; they converted emergency measures dictated by the urgent needs of the crisis into the permanent structure of government. Nothing is easier for a state to do on the plea of increased protection, or security, or prevention of inflation - in short, on the plea of the continuance of the emergency. And so the state became paramount; it was interested not in the individual as an individual, but merely as a member of a trade or class or an 'interest' organised to satisfy its own economic or administrative needs. Thus each single man became, in effect, the slave of the state. The Imperial Government clamped down upon the whole Empire the bars which were to hold it together and which achieved its imprisonment.

The reforms of Diocletian and Constantine were a stupendous effort to organise, or to plan, security. And first, the security of the Emperor, that is, of the unity of the Empire

For sixty or seventy years the imperial authority had virtually been in the gift of the soldiers, and anarchy

had resulted. Now it was to be dissociated from dependence upon any sectional interest. The Emperor's person was to be remote and detached; he was rarely seen in public, he was surrounded by a court of the Oriental pattern. Court officials, with new titles, guarded his person, and admitted to audience; semi-religious ceremonial invested him with divine authority, which he wielded as the partner of God upon the throne. Augustus had claimed to be the chief citizen, Diocletian was a monarch.

How, then, to break away from dependence upon the army, and not perish at its hands? The changes in the army which had come about gradually during the last hundred years were accepted and extended and systematised. The army was no longer officered by the senatorial and equestrian orders; 'barbarians' rose to the highest posts; the career of the soldier became exclusively military and professional. The army commander no longer carried out administrative work, civil and military posts were separated; the proconsul, familiar in early days as governor of a province and also commander-in-chief, was a thing of the past. The general was dependent for his supplies on the civil administration which was responsible to the Emperor, and he was thus held in check Henceforth the soldier was to have no touch with administration, justice, supplies or taxation. He was a soldier pure and simple, with no inducements to meddle with other matters, which were all in the hands of imperial officials, and no opportunities to gather into his hands the resources necessary for political initiative. Strategy, tactics, weapons all changed, the auxiliaries became more honoured than the legions; cavalry, the arm of the barbarian, took precedence over infantry, for barbarians had to be fought by barbarians and by their own weapons. The frontier garrisons (limitanei), once the defenders and disseminators of Roman civilisation and honoured as such, were now the least efficient troops, for they were recruited by forced levy from landowners, and were reinforced by hired barbarians. The troops stationed near the cities on the interior lines of communication (comitatenses) to form a mobile force now stood highest in repute, though the civilians of the neighbourhood were often hard tried by their exactions and rapacity.

To maintain the army the Empire was turned into a vast administrative machine designed to produce taxes. The machinery took more men out of production, and civil servants have a way of attracting to themselves more civil servants. Diocletian saw that the Empire was too large for one man to govern; there were precedents for 'associate-emperors', and so he divided the Empire and placed over half of it his paitner, entitled like himself an Augustus. To each Augustus was assigned a 'Caesar', a kind of adjutant though with special territorial responsibility. The theory was that the Caesar would succeed the Augustus, and so the problem of succession would be solved. The provinces, Italy included, were now broken up into more than a hundred areas grouped into dioceses, the dioceses themselves being grouped into prefectures. Titles were changed, it is now that comes makes its appearance to denote official position, as e.g. the 'Count' of Africa; the dioceses were under Vicars, as e.g. 'the Vicar of Spain'; the Emperor's advisory council was the Consistorium.

One of Diocletian's most urgent tasks was the reform of the currency in order to check inflation. Closely connected with this was his attempt to fix maximum prices for goods and services. The edict, of which part survives, defines the prices for such things as food, timber, leather, textiles, cosmetics and the like. It fixes the rates

for workers, such as shipwrights, silk and wool workers, painters, primary and secondary schoolmasters, and determines a schedule of freight rates; goods on government account were to be carried at cheaper rates, which can hardly have shown a profit to the shipowner. The mints were manipulated in a way which was equivalent to the turning out of paper money by modern governments. The attempt at stabilisation failed, probably because the mines were not turning out enough gold and silver to provide an effective currency of gold and silver coins.

The chief tax was paid annually in kind. The amount required was announced each year, and divided among the four prefectures; the land was surveyed in terms of productive capacity and the quota of tax was apportioned out. This preliminary survey and the collection of tax were placed as a responsibility upon the town councils, landowners and other agents. The post of town councillor, once a coveted honour, was now a burden; for the town councillors not only did the work, but were themselves treated as guarantors of the specified tax of an area. Every five years there were special taxes, including a tax on trading profits; and indirect taxes, e.g. customs, operated perpetually. Thus, councils, landowners, business firms and companies were forced to work as unpaid civil servants collecting the data and the taxes, very much as business houses today keep clerks and accountants as unpaid civil servants to make the returns required by the state.

But it was useless to tax if excessive taxes drove men from the work which produced the taxes. Yet, for the purposes of the state, work must be done – 'essential work'. And so labour and skill were not merely 'directed', but were tied down to the field or bench or dockyard or office. The farm labourer could not leave

the farm, nor the tenant-farmer the estate; moreover, his children must be brought up to succeed him. If, overburdened by taxes, the landowner abandoned his land, the state took it, and eventually the greater portion of the Empire passed into state-ownership. In the same way factories were nationalised. Transport was an essential service; and so the voluntary associations of dockvard labourers, merchant marine and the like were used by the state as instruments of coercion; membership must be maintained and contracts for public services must be carried out. Hence arose a caste system; no matter what his work - town councillor, soldier, factory worker, official - each was tied to his job and status, and his children after him. If by chance he did 'improve' himself and obtained a permit to change his work, he would be liable to higher taxation; he might then be ruined. Better to remain as he was. Thus, there was no incentive to enterprise or initiative or saving; the state effectively killed them all. Production fell, and with it the standard of living; the rigid uniformity of a lifeless and static mediocrity prevailed. The price of security was the absorption of the individual by the state.

The movement of the centre of gravity eastwards likewise received recognition. Diocletian had virtually made his court and headquarters at Nicomedia on the eastern coast of the sea of Marmora; for in the past the dangers had come from beyond the Danube and from Persia; Nicomedia was a strategic point. But the ancient city of Byzantium, a Dorian colony founded about 600 B.C., lay across the water, protected or approached by gates of sea and served by an incomparable harbour. Here was an impregnable site for the new Christian city of Constantine, the new capital of the new Christian Empire, Constantinople. Years were given to its build-

ing, it was adorned with works of beauty gathered from many cities, pagan works and Christian alike But no pagan sacrifice was offered within its walls, for it was dedicated to the new faith. For nearly a thousand years it stood inviolate, till in 1204 it was taken by Crusaders professing the faith of its founder; but till then it sheltered the religion, the learning and the power of the East Roman Empire, the so-called Byzantine civilisation.

And so the Empire was held together. Diocletian and Constantine undertook a work of reconstruction, much as Augustus had undertaken it years earlier. But, whereas Augustus reconstructed by mobilising forces and energies and goodwill to undertake a voluntary effort. the reformers of the third century had to impose a machinery designed to extract the resources necessary for the work of government and the ensuring of security Of contemporary literature there is little, for the spontaneity necessary to literature was lacking. In time life and letters revived; a new imagination manifested itself, but in the members rather than in the body itself. in Africa and Gaul and Egypt. It throbbed more strongly in the arteries of Christian thought and life than in the tired channels of paganism; and eventually those members detached themselves to live their own life.

#### CHAPTER IX

#### CHRISTIANITY AND THE ROMAN EMPIRE

IT was said earlier that the Romans were extraordinarily tolerant to alien religions. Why, then, did they 'persecute' Christianity, and how did the Empire eventually become Christian?

To answer this question it is necessary to go back to Judaism. Rome tried patiently to solve the problem of the Jews; she granted them every concession. Religious affairs and civil jurisdiction were in the hands of the Jewish Council, with the High Priest as president. The Jews coined their own money, but no image of the Emperor was impressed upon it; they were exempt from military service, and the few Roman soldiers stationed in Jerusalem left their standards at Caesarea. All that Rome asked was that the Jews should furnish tribute and should live in peace with their neighbours and with the strangers, chiefly Syrian Greeks, in their land. 'Gallio cared for none of these things,' and that was the invariable and the right attitude for a Roman magistrate; for Rome left freedom in religious matters to her subjects. But tolerance was met by nationalism and fanaticism. Most Jews believed that to their nation would fall the dominion of the world, for Jehovah was lord of all. A few, taught by experience and by history, discarded this belief and held that Jehovah was lord of all men's minds, for all worship of whatever kind was ignorantly a recognition of Jehovah. But the last thing the average Jew understood was universality, thus differing from some of his prophets; hence ceremonies were retained which made for exclusiveness and particularism. The Jews drew close to one another, emphasising race and claiming exclusive possession of their own land. In Jehovah's good time, if they were true to their faith, they would be triumphant: for they still held to their belief that as Jehovah's agents they would rule the world. If as a compact nation cleaving to their religion they developed an independence of their own. doubtless they would thus become the more serviceable instrument in Jehovah's hands. But patience was not in the Jew's nature, in spite of his history; and nationalism enflamed by fanaticism was always liable to break out. Perhaps the small size of the Roman force in Palestine - about 3,000 men - was a temptation not to be resisted. But into the history of these outbreaks and into the measures taken by the Roman Government we cannot enter.

With the Jews scattered over the Empire, chiefly no doubt in Rome and in the centres of trade, things were otherwise. Rival factions sometimes created disturbances, but on the whole these Jews lived peacefully, though neighbours might ridicule their customs. But life out of Palestine had broadened their minds; and, though they might make the yearly journey to the Temple at Jerusalem, they were less exclusive, less nationalist than those who lived under its shadow. Thus, the immunity granted by the government and the contempt of the populace combined to secure freedom for the Jewish religion.

For thirty years or so this freedom was enjoyed by Christianity, not because freedom was consciously granted, but because Christianity was not distinguished from Judaism either by the government or by the people. At first the disciples continued to observe Jewish law in Jerusalem; soon the Church, as *Acts* tells us, rapidly grew from 500 to 3,000, then to 5,000; for many

Jews visiting Jerusalem for the Feast were converted. The Christian leaders were soon driven by Jewish persecution from Jerusalem to the synagogues of Samaria and Syria; persecutors followed, Saul being among them. Soon two victories were won; henceforth the Gospel was to be preached to Gentiles, and converts were freed from Jewish customs. The Apostle of the Gentiles could now carry a Gospel emancipated from Judaism, though the enmity of 'Judaisers' dogged all his travels.

St Paul travelled by the high roads of commerce and communication now made secure by the Roman peace; he visited first the Jewish communities and then preached to the Gentiles, using the Greek language of the day. His converts were mainly of the lowest social grade; and, when his preaching caused disorder, it was the Jews who excited it. He was protected by Roman officials as a Jewish sectary. Festus would have dismissed his case as 'concerning your own religion' if St Paul, when accused of treason, had not appealed to Caesar; for, as Festus saw, the issue was one not of treason but of religious observance.

But, if the Roman Government knew no distinction at this time between Christianity and Judaism, the people soon did, for it learnt that there was in their midst something more contemptible, and something more dangerous, than Judaism By A.D. 64, the date of the persecution under Nero, the government had at last taken notice of it, for, as presented by its attackers, Christianity deservedly provoked official attention, it failed to satisfy the terms on which Rome granted tolerance.

In the first place, Christianity was particularly vulnerable to misinterpretation: secondly, Christians often deliberately invited persecution. To the Roman of the time Christians appeared to hate the human race. They looked forward to the early return of Christ when all

but themselves would be destroyed by fire as being evil: and in this disaster to 'Eternal Rome' and to the hopes of mankind they seemed to glory. In the second century and onwards this attitude of mind expressed itself in a different way; Christians went out of their way to provoke enmity that they might win a crown of martyrdom. Christians came from the lower orders of society, and their teachings seemed to aim at social revolution. They masked behind secret meetings the most frightful practices - gross immorality and cannibalism (for such interpretation could be put upon the content of such passages as St John vi. 52-9). They disrupted family life. for a convert from a family would not take part in the family worship or in some elements of family life, such as amusements. They gave evidence of their belief that the world was soon to perish by their refusal to cooperate in religious festivals, to shoulder civic responsibilities, or to serve in the army. But the pagan valued his world and his civilisation. Such was the popular attitude to Christianity in the second century.

The Roman Government had easy tests. Had the cult been 'recognised' under the 'Law of Associations' which forbade regular gatherings of people except under licence? If not, it was an 'unlicensed religion' and must be suppressed, for it might hide anti-social or criminal plots of the worst kind. The magistrate in the course of his duties could deal with that. But the matter became more important if treasonable activities were suspected; would the Christian make a demonstration of loyalty to 'Rome and Augustus'?

The Christian refused, the state persisted, each misunderstood the other; each started from an opposite point. To the Roman the unity of the Empire was of vital importance, and homage to 'Rome and Augustus' embodied and expressed that ideal. It was an act of

political faith. Other cults were perfectly prepared to render that homage - except the Jews, with whom as a race the Government had come to terms; but such terms could not be granted to Christians who claimed converts in every race. Besides, the Jews did render annual sacrifice in the Temple on behalf of the Emperor, and that was enough. To the Christian the act of homage to the divinity - whatever that might mean - of Rome and Augustus was an act of religious faith, and inconsistent with the Christian faith. Hence arose the misunderstanding; neither side could see the other's point of view. Moreover, there were Christians who felt that every daily act which contributed to the welfare of the state contributed to the maintenance of idolatry. Thus, one side thought in political terms, the other in religious terms, and, as the religion was quite unlike any other in its refusal to 'live and let live', conflict was inevitable. The Christian claim to universalism seemed to aim at a state within the state, spreading its propaganda in secret. The Roman point of view is eminently intelligible.

Two points must be added. Even in the earliest persecution, that under Nero in A.D. 64, the 'Name' of Christian, as representing complicity in subversive and unspeakably loathsome practices, was the cause of persecution; and the test of 'Rome and Augustus' was applied henceforth. Secondly, there seems (more cannot be said) to have been no general edict against Christianity in the first two centuries. Persecution was spasmodic, and extremely local; it originated chiefly as the result of breaches of the peace which brought the question to the notice of the provincial magistrate. At any rate, in A.D. 112, Pliny, governor of Bithynia, wrote to Trajan, the Emperor, asking advice. 'Is the Name punishable or only the crimes attached to the Name?' He had imposed the test of worship. Trajan replies that no univer-

sal rule can be applied; Christians must not be sought out; if they are proved to be Christian, they must be punished: anonymous accusations are not to be entertained. It appears that Trajan, in spite of the large number of Christians in Bithynia reported by Pliny, did not regard them as actively dangerous. In the reign of Antoninus Pius and Marcus Aurelius persecution was generally originated by mob fury rather than by official mitiative.

But in the third and fourth centuries the relation between the Church and the Imperial Government underwent changes which were bound up with the changed circumstances of both. Persecution was now by general edict of the Emperor, and not by local exercise of magisterial initiative The Church had grown in numbers, in power, and in prestige. 'We are but of yesterday,' said Tertullian (at the end of the second century) in a wellknown passage, 'and we have filled every place belonging to you; cities, islands, fortresses, towns, assemblies. even the camps, your tribes, your electoral divisions. the palace, the Senate, the law-courts; the only thing we have left to you for yourselves is your temples.' Moreover, Christianity had taken shape both in external organisation and in the clarification of its doctrine in relation to the problems of human life in the Empire. It was now the religion of some of the ablest and besteducated men of the day. The earlier language of apocalypse ('revelation'), fiercely uttered in the expectation of the Second Coming, had been replaced by the patient pleading of defence ('apologia') and exposition. Christianity met its opponents on whatever ground they might choose. Long periods of peace, which were not always to the advantage of the Church, were interrupted by spasmodic persecution; and again it must be stressed that persecution was not undertaken, any more than in the first two centuries, in the name of religion, but in the interest of the unity and well-being of the state. For Christianity was true to its early intolerance; it would not accept a place among its contemporary religions; the claim which it made upon its adherents was absolute. But in the third and fourth centuries the state was desperately concerned with unity.

The change in the relations of Christianity and the Government may perhaps be seen most quickly by glancing at the reasons which brought about the persecution. Septimius Severus was not originally hostile; indeed he gave the care of his son Caracalla to a Christian nurse; but he became alarmed by the rapid increase in the number of Christians and he forbade baptism of pagans. The prohibition lapsed after his death. The measures of Decius were more drastic; they were inspired by the growing signs of the organisation of the Church as an exclusive section of society, by its pacificism and the resulting threat to the military efficiency of the Empire, and by the Emperor's desire for good relations with the Senate. Every citizen was ordered to appear before the magistrate and to make sacrifice to pagan gods and to receive a certificate that he had so sacrificed. Here is an extract from a certificate found in Egypt. 'I have always sacrificed to the gods; and now in your presence (i.e. of the officials) and according to the terms of the edict. I have sacrificed ... and I ask you to add your signature ... I, (the official), ... saw him sacrificing and have signed my name.' Thus the Christians were revealed; and, though fierce persecution followed for a brief time, the original intention was to cause wholesale renunciations of faith. And the edict was successful not only in causing 'lapses', but also in creating endless trouble for the churches on the question of the readmittance of the 'lapsed'; moreover,

the number of Christians who fraudulently obtained certificates cast discredit upon the faith. In A.D. 257 Valerian attempted to bring about the Christian tolerance which had been refused for two centuries by ordering the higher clergy to sacrifice, while permitting them to remain Christian in private, and in the east laymen and clergymen were punished for being Christians. especially harsh penalties being prescribed for senators and knights. The Church as an organisation was thus attacked But it was under Diocletian that the issue was most clearly defined. In his desperate efforts to cement together the Empire he was particularly sensitive to influences which tended towards separatism. Though at first he underestimated the strength of the Christians. by A.D. 303 he had reached the conclusion, under pressure from Galerius, his partner in rule, that there was indeed a state within the state. His measures went beyond precedent. No Christian could hold Roman citizenship; therefore he could hold no post in the imperial or municipal services, nor could he appeal from a judicial verdict. No Christian slaves could be freed. The churches and the sacred books were to be destroyed. This edict was followed by others. The clergy were to be imprisoned and were to be made by torture to sacrifice to the gods. The aim was to rob the laity of its leaders and the organisation of the Church of its main supports. Finally, this last edict was made to apply to all Christians.

Thus, in the interest of the unity of the Empire, Christianity was to be broken up and dispersed. And the edicts, while they did not bring about the unity of the Empire, did cause disunion in the Church

But during the years which followed, the unity of the Empire was threatened rather by the open conflict of rival Emperors, and in A.D. 311 the next stage was

reached in the relations of Church and Empire. 'Nevertheless, because great numbers still persist in their opinions, and because we have perceived that at present they neither pay reverence and due adolation to the gods, nor yet worship their own God, therefore we ... have judged fit to ... permit them again to be Christians. ... It will be the duty of the Christians ... to pray to God for our welfare and for that of the public and for their own ...' This was the 'Edict of Toleration' issued by Galerius, a former persecutor, as he lay dying of a frightful disease. But it was the so-called Edict of Milan, A.D. 313, which put the matter on a new and regular basis the religious neutrality of the state. It is possible that no such pronouncement was issued as an edict; but, as given by the historian Lactantius, the 'Edict' certainly sums up authentically the instructions sent by the Emperor Constantine to his officials during the years A.D. 311-13. Its drift can be gathered from these extracts: ... no man should be denied leave of attaching himself to the rites of Christians or to whatever other religion his mind directed him, that thus the supreme divinity, to whose worship we freely devote ourselves, might continue to vouchsafe his favour and beneficence to us ... The open and free exercise of their respective religions is granted to all others, as well as to the Christians ... and we mean not to derogate aught from the honour due to any religion or its votaries.' All Church property was to be restored, even at a cost to the imperial exchequer. And at the same time the Emperor Constantine declared himself a Christian, and without persecuting paganism weighted the scales of neutrality strongly in favour of Christianity.

The Roman Government had been puzzled about Christianity. It took time to discover the new faith; it had discovered it and misunderstood it. Through mis-

understanding it had applied an impossible test; the test refused, it persecuted spasmodically; intermittent persecution seemed to serve only as a stimulant; the first general persecution was too late; neutrality was now the only course, and it remained the permanent policy for sixty years. Emperors might be pagan, and, indeed, like Julian the Apostate (A.D. 361), might give all encouragement to paganism, just as Constantine before him had supported the Christian Church; but neutrality officially prevailed. In A.D. 378 the last step was taken by Theodosius, who surrendered neutrality and proscribed paganism. The temples were nationalised, and became museums of art. The calendar hitherto based on pagan festivals was reformed. The gods were legislated out of existence, though not without opposition. The state employed the same instrument in favour of Christianity which had been employed against it in the previous century. And paradoxically the state was influenced by the same motive as before. Whereas, earlier, in the supposed interest of the survival of the Empire as a unity held together by religious sanctions, it had persecuted Christianity, now, with the same purpose it strove to stamp out the enemies of Christianity. Hope of the success and survival of the Empire depended on that which had once been thought to be disruptive of imperial unity and welfare. The state placed itself under the aegis of the Christian religion, the religion of a minority of its members. Thus, the state was true to the belief of the Romans of the early Republic, that Rome depended upon the goodwill of divine power. So, it might be said, had primitive Roman faith vindicated itself.

So momentous and so sudden a reversal of policy as came about in A.D. 313 cannot be explained as the inevitable and almost predictable result proceeding from sufficient causes. The historian, tracing the course of

things and assessing the nature of men's thoughts, is suddenly startled by an event for which he is totally unprepared. The change was brought about by one man, Constantine, whose character refuses to fit into the pattern of the age, whose convictions are uniquely his own, whose very language, as shown in letters and rescripts, is new and unexpected. Twenty or so years after the persecution by Diocletian, Constantine, the Roman Emperor, writes such sentences as are quoted below (the circumstances in which they were written cannot here be narrated): 'divisions of this kind (in the Church) should not be kept from me, for by them the high God may be moved not only against the human race, but also against me myself, to whose care by His heavenly will He has entrusted the guidance of all the affairs of earth, and so may in anger decide things otherwise than hitherto For then indeed shall I be able to be most fully free from anxiety and to hope to receive always all that is most prosperous and best from the ready generosity of the most powerful God, when I shall see that mankind, held together in brotherly unity, adores the most holy God with the worship of the Catholic religion, as is due to Him.' 'The result (of schism) is that the very men who ought to preserve brotherhood in unity of mind and spirit stand apart from one another in a shameful and wicked feud and so provide those who keep their minds turned away from this most holy religion with an excuse for mocking at it 'The Gospel books and the Apostles' books and the prophecies of the ancient prophets teach us clearly what we ought to think about the Divine. Therefore let us drive away the strife which creates war and let us find the solution of our problems in those divinely-inspired writings.' 'The eternal and divine goodness of our God which is past understanding by no means permits the conditions of mankind to wander too

long in darkness, nor does it allow the hateful wills of some men to prevail so long that it will not open afresh to them by its own most brilliant lights a road to salvation, nor grant to them conversion to the rule of right-eousness. I know this full well from many examples, and I can gauge it from my own case ... Of a truth I cannot describe or enumerate the blessings which God of His divine generosity has granted to me, His servant. I rejoice therefore, in particular I rejoice, that ... you (the Emperor's 'most dear brothers, the Catholic bishops') have recalled to a better hope and a better state those whom the malignity of the devil seemed by his persuasion to have turned from the glorious light of the catholic law. O truly victorious providence of Christ the Saviour'

These brief extracts have been given because there is no more expeditious method of revealing the rapid change which has come over the thought and language of the fourth century as compared with those of the second century.

Here was a Roman Emperor who had identified himself with Christianity, the Christian Church and the Christian Creed, who was convinced of a mission from which he could not escape, laid by the Christian God upon him as His servant, who devoted patience and energy to the cause for unity within the Church as an essential condition of the unity and prosperity of the Roman state, who was not content even with a united Church but felt himself charged with a special duty towards 'those outside' to bring them within the fold of a truly catholic Church.

At first, Christianity was preached to the lowest orders of society living upon the high roads of communication; by the end of Constantine's reign it had penetrated into the innermost parts of the Empire, and up to the highest levels. At first it laid stress on the

immediate return of Christ, and its language was the language of 'apocalypse'; later it took a longer view. and reasoned defence and explanation of its doctrines brought the Gospel to the educated; and attack - the hest means of defence - assailed the foundations of paganism. Its attitude to works of pagan literature and learning had at first been uncompromising, for they were the bible of paganism. After struggles of conscience the ablest men of the Church realised that pagan literature was separable from paganism, and that Christianity could not refuse itself the aid of education and scholarship. In the early part of this period of three hundred years the hostility of the people had set in motion the repressive measures of the state; in the latter part the state, more nervously solicitous for imperial unity than in the Principate, itself took the initiative. while Christian and pagan on the whole settled down in peace with one another under an all-pervasive domination. In so far as originality of thought and expression survived, the advantage lay with Christianity; for while pagan thought and letters and religion could only plough again familiar acres now almost exhausted, Christianity had a new interpretation of life to offer, and its vitalising message transformed old modes of thought and language. Even before the reign of Constantine the Church held property, though under what legal title is obscure. From persecution to neutrality to favour; from degradation to respectability to dignity; from unquestioning faith to statements of creed couched in the most searching of philosophical terms; from ignorance to learning. Henceforth the Christian Church was armed with all the panoply which Greco-Roman civilisation could furnish for the next period of its history. But that is the chapter of the Middle Ages, though in a very real sense still the history of Rome.

### CHAPTER X

#### THE FIFTH CENTURY

Neither grey hairs nor wrinkles can suddenly take away moral authority, a life honourably lived reaps its rewards of authority to the end CICLRO

WE now pass to the beginning of the fifth century, not in order to give an outline of events, but to look back from that standpoint upon some of the changes which had taken place in Roman institutions and ideas. For present purposes all that need be recorded between A.D. 337 (the death of Constantine) and A.D. 400 is that a brief attempt had been made by Julian to revitalise paganism, that Theodosius had established Christianity as the official religion, that in A.D. 395 his two sons had divided the Empire into two parts, Arcadius ruling in the East and Honorius in the West, and that the pressure of Huns and Goths upon the northern frontier of the Danube had become severe and alarming.

In the sphere of government and public life the old ideals have passed away, though the names remain, a shadow without substance, the reign of Diocletian and its inauguration of the all-powerful state had in fact destroyed all that Cato or Cicero, or even Pliny, had regarded as an essential characteristic of Rome.

The partnership of Augustus and the Senate had gradually broken down; the position of Princeps had become more autocratic during the first century; and, though for a moment under the Antonines the Senate had dreamed of a restoration of its position when it exercised influence in the choice of an Emperor's successor, those dreams had been shattered in the third century by the army's usurpation of authority. After Dio-

cletian the Senate, though it might meet as a council, gradually became an 'order of society', enjoying certain exemptions from taxes and certain dignities. Very many members of this order had never seen the city of Rome or even travelled outside the provinces in which they were born. From being an 'order' of men elected by the people to magistracies and so qualified to sit in the great council of the Republic, which in fact though not by right had governed the Roman world, senators became a stratum of society, enjoying privileges but no power. They drew away from other men, aloof and self-contained, and cast back their minds to the traditions and the literature and culture of an age which they fondly thought could never really pass away. The power of the Emperor, girt about with the sanctity, first, of 'divinity' and later of vice-regency as God's representative, was absolute and was not called into question. The hope of a Republican restoration which the senators of the early Empire had cherished had now long been forgotten. Yet the old phrases are kept; when in A.D 458 the Emperor Majorian writes, purely out of politeness, to the Senate, he addresses them as patres conscripts, 'enrolled fathers', the most ancient name of the Senate dating from the early days of the Republic. He acknowledges that the Senate has chosen him and the army has ordained his appointment. He describes himself as Princeps, the title used by Augustus; yet he also speaks of his regnum, his position as rex, the title abhorred by Romans, and he hopes to serve faithfully the respublica, the ancient name for the commonwealth, which has compelled him to reign.

Roman citizenship had once been a valued possession. In the early days of the Republic citizenship had been fought for and won; in the last century of the Republic 'allies' of Rome had wrested it from an un-

willing donor. The appeal made in virtue of his Roman citizenship by the greatest Roman citizen of the first century A.D., St Paul, had received immediate attention. The dignity of that status, as well as its rights and duties, had been the creation of a long process of political development; which had come to its full stature under the early Empire. It was already declining when the Emperor Caracalla enfranchised virtually the whole of the Roman world, in order that the whole world might pay the taxes due from a Roman citizen And now the idea of citizenship had vanished: the municipal towns no longer cherished a valued civic life, they bore only the burdens of taxation; and town councillors had exchanged the pride of office for the enforced responsibility of tax-collection. Men were finding in membership of the Christian Church the sense of citizenship which neither Rome nor municipality could any longer offer them.

Many of the great offices of state, the magistracies, had disappeared or had been so altered as not to be the same offices except in name. The function of the practor was now to organise public shows; once he had been a high judicial authority. The consulship was a high honour - for it was bestowed by the Emperor - and was nothing more; yet in A.D. 399 it was so valued that it is called a 'Divine reward'. The great provincial commands, formerly the last honour and the heaviest responsibility of those who had served the state in a series of magistracies to which they were elected by the people, became rungs in the ladder of promotion ascended by the professional civil servant employed by the Emperor. Their original powers and duties were divided and placed in the hands of separate officials, all acting as a check upon one another. Once the provinces owed their romanisation in great part to the enlightened policy of able administrators; now the civil servant was hated, for his function was to extort taxes, to see that none left their appointed guild or sought other work or evaded tribute to the state in money or kind or services. The state was the universal master. In the early days of the Republic, when the plebeians had demanded a champion, they forced upon the patricians the creation of tribunes to safeguard their interests. And now the oppressed found their protection again, not in a magistrate of the state, but in the persons of the bishops of the Church. Popular demand forced upon men of its choice the rule of bishop; St Ambrose, Bishop of Mılan, was not even baptised when he was compelled by the crowd to shoulder the responsibilities of this office. The letters of men like St Ambrose and St Augustine show clearly the work of the bishops. They resist official tyranny, they withstand provincial governors, with whom personally they are often on friendly terms, they take matters to the imperial car itself, they arbitrate in disputes and guide and guard their peoples in all the difficulties of their lives. It is now that the Church becomes the leader in the alleviation of poverty and distress, in providing hospitals and schools and orphanages and charity of all kinds. And so it offered to men a hope and belief that the individual still was of worth, though society might be in bondage to the state. The bishop virtually took over the functions of the city magistrate who by this time was an unwilling tool of the Government; and the bishop was the choice of the city population.

As for the army, formerly it was the Roman's privilege to fight as citizen and protector of his family and his gods on behalf of the city of Rome. The cavalry had taken precedence, then later the legionary. But the growing needs of Empire had changed this; first the professional army, then the recruitment of non-Roman

elements, and finally the barbarisation of the army. Now, barbarian kings were employed to defend the frontiers at a price; the least civilised of the provincials were swept into the army with all the remnants of the population that were not exempted by other forms of services essential to the state. From being an apostle of romanisation the soldier, and no less his officer, was now the roughest and most uncivilised element of the Roman world. Discipline was harsh and merciless, as the enactments of the Code of Theodosius show. The most honoured arm was the cavalry, now protected in armour and mail, from which the panoplies of Arthur's Knights of the Round Table were directly derived.

Land was passing out of the hands of the smallholders, and of farmers on a moderate scale. The state confiscated what it needed or found to be unproductively managed. Landowners annexed neighbouring estates which could not produce what the revenue collectors demanded; for the state was concerned not so much with maintaining titles to ownership as with ensuring that the land paid tribute in tax or kind or in the services of the labourers upon it. Huge domains passed into the hands of one family; and thither flocked the former middle classes in order to secure, as virtual serfs, a livelihood and some protection from the attentions of the state: for often the landowners were able to evade or to defy the Government officials. Moreover, the corruption and bribery were on a colossal scale, as the Theodosian Code shows; the Emperor tried to check them by enactments from the seat of government, but his authority was impotent. The bailiffs of the large estates made their arrangements with officials, sometimes cheating their employers, sometimes in collusion with them, sheltering deserters from the army, rendering false returns with the connivance of land inspectors. The picture is terrible.

Yet it was precisely on these large estates owned by the country aristocracy that culture of the old kind flourished. In Gaul and Africa the landowners lived a secluded life in their luxurious houses, corresponding with one another (for letters were greatly in vogue as a form of literature), discussing the literary ments of the classical writers Vergil, Horace, Terence, Statius and the rest There were centres of academic studies throughout the Empire; and Gaul, especially, could claim several of note, in particular that at Bordeaux. Literature was the favourite study, philosophy languished. But in spite of the aridity of much of this study it was pursued with an earnestness which is in a sense pathetic; for it proceeded from two contradictory and subconscious feelings - first, that the old culture was passing away; secondly, that it could never pass away, for then nothing but void could be imagined.

Rutilius Claudius Namatianus was a member of one of the Gallic noble families, whose estates were 'made ugly' by the invading barbarians. His father had held office in Rome and he himself had been Prefect of the City in AD 413, six years after the law condemning paganism and four years after Alaric's descent upon Rome. In a poem of 700 lines he tells the story of his unwilling return from Rome to Gaul to look after his lands, with what reluctance he tore himself away from the city 'where the sky is clearer above the seven hills', and as he leaves he utters amid his tears a grateful prayer:

Rome is the Queen of the world, nurse of men and mother of gods, whose majesty shall not fade from the hearts of men till the sun itself is overwhelmed her gifts are as widely spread as the sun's rays – the sun

which rises and sets on lands ruled by Rome. Her advance was held back neither by the scorching desert nor the 1cy armoury of the north wherever Nature had fostered life, there Rome had penetrated. She had made one fatherland of many nations, and to be brought within her rule was a blessing. What was before the world Rome had turned into one city, offering the conquered partnership in her own law. Clemency had tempered her might of aims. whom she had feared, she had overcome, and whom she had overcome she loved. Embracing the whole world in her law - bringing victories, she had made all things live together joined in a common confederacy. Other empires had waxed and waned but Rome's war had been righteous, her peace free from pride, and glory had been added to her vast resources. Her deeds had exceeded her destiny; what she ruled was less than she deserved to rule ... And then Rutilius calls upon Rome to summon to her aid her old courage and fortitude ... Despise the pain, the wounds will heal and the limbs grow strong. From adversity snatch prosperity, from ruin riches. The heavenly bodies set, only to renew their light what cannot sink leaps most quickly to the surface: the torch is dipped that it may blaze more brightly The foes of Rome, for a moment victorious, were routed one and all and even Hannibal lived to regret his success. The disaster which wrecks others renews Rome; her power to thrive in calamity will give her a second birth. Her enemies shall be brought low, and eternally for Rome the Rhineland shall be ploughed, the Nile shall overflow its banks, and Africa and Italy and the West shall lavish corn and wine.

The poem breathes much of the atmosphere of the Rome of four centuries earlier; the gods are there, the myths places exercise their old charm, the old institutions receive due reverence, and the 'ancient ways' still

delight the magic of Rome pervades all. There is no hint that the old order has passed, Christianity receives no mention; there is still the faith that Rome can emerge triumphant. Rutilius is not alone, either as a devoted Roman or as a provincial devoted to Rome. Claudian, who was born in Egypt, cared not whether the Western Emperor was Christian or pagan so long as he was Emperor of Rome, for the Eastern upstart, Constantinople, he detested: his passion was the Senate and the pagan institutions for which it stood. He also obstinately clung to the past, and from the past created a Roman future. The letters of Symmachus, too, relate in placid calm the trivialities of the day, and assume the maintenance of the priestly colleges and the ordered routine of the ancient worship Yet he lived on friendly terms with some of the most uncompromising enemies of paganism. And there were many others like him

There was, however, another place besides the houses of Gallic nobles in which the culture of Greco-Roman civilisation was preserved – within the Christian Church itself, in the bishops' houses and schools, in monasteries, in Church foundations, and even in hermits' cells. As is well known, there had been a division of opinion among Christian writers and thinkers; some, like Tertullian, were for destroying all that was pagan in origin; others, like Clement of Alexandria, were for 'spoiling the Egyptians'. By the fifth century this conflict had largely been resolved, and Christian leaders were often the besteducated men of the day. In these centres there was life and enterprise; the Roman training in rhetoric found a new outlet in the sermon and the theological treatises, which were often published in instalments eagerly awaited by their readers. Disputes with pagan supporters of the old learning gave opportunity for polemical pamphlets, while the necessary and voluminous

correspondence of men like St Augustine and St Jerome gave new reality to this form of writing.

In this way it would be possible to summarise the changes which have taken place in the principal Roman ideas and institutions. But the real nature of these changes can be seen only by a reading of some of the literature of the time, as e.g. the letters of Symmachus, and Sidonius and St Augustine and St Jerome. But there remains one topic which may receive slightly fuller treatment, namely the fate of Roman religion.

As the Empire expanded to include the Mediterranean area, new cults and rituals and philosophies had spread from one end to the other, some indigenous to the area, others coming from Persia and the further East. The worship of the Great Mother we have already spoken of carlier; but hosts of other deities claimed worship -Mithras the Sun-god of Persia, Isis and Osiris, gods from Egypt, the god of Syria, who was called Jupiter Dolichenus, and the like. There are the gods of the countryside, Italian and provincial, with names and cults going back into pre-Roman times, the gods of the state, Jupiter, Juno, Minerva and the rest, vague powers, Fortune, Tutela, Genius in manifold forms; abstract ideas like Fides, Concordia; gods peculiar to districts and localities like some of the Gallic gods. And gods borrowed, and combined names and rituals and legends. And all these cults - and they run into hundreds - were carried on in spite of the nominally Christian Empire. Emperors might persecute them, but they persisted and the imperial authority was powerless. For the Roman noble families insisted on the maintenance of the gods of the Republic, and popular sentiment and habit would not part with traditional superstitions Society as a whole - except the sincere Christians, and it must not be forgotten that there were many nominal

Christians - kept alive ancient Roman cults for one overwhelming reason, that the continuance of the Roman state seemed to depend upon the continuance of the Roman gods and their worship. Personal religion might be satisfied by any other worship, but the Roman rites which had been handed down for centuries must go on, for the whole structure of organised life depended on them. And organised life - in fact, touch with the 'ancient ways' - had been almost destroyed in the troublous times of the third century. At all costs it must be preserved, and it could be preserved only in the hallowed forms of religion, and in the literature and the sentiments which enshrined those forms. The noble families handing on traditional culture had watched religion after religion becoming popular; Emperors had associated themselves with the cult of the Sun-god, of Hercules, of Syrian Baal, and others, the last was Christianity, but there was no reason why it should continue. The Emperor Julian's reversion to paganism was a good sign; and, though he had failed to destroy Christianity as the 'official' religion, what he had attempted could be successfully achieved later. But in fact it was not the existence of Christianity or any other cult which the champions of pagan culture detested; for there was a large and easy tolerance, and, as one of them said, there is 'no one road to so great a secret'. What they opposed was the Christian hatred of the old Roman cults which had gone on for centuries and which had been the guarantee of the stability of Rome

But they meant much more than this. When Ennius had said that the welfare of 'Roman things' stood rooted in the ancient ways and in the sterling quality of Rome's men, he had in mind Rome as he knew it. Since then the horizon had broadened; the whole of Mediterranean

civilisation which Rome had taken under its wing was now Greco-Roman civilisation and for its continuance. Rome was responsible. Within Greco-Roman civilisation there lay the possibility of perfection and finality. Not that the world was perfect or that human institutions were final, but within the 'thought-forms', if the phrase may be used, at which that civilisation had painfully arrived - in politics, in social ideals, in ethics, and in the material expression of these things - there was the hope of perrection. This - and much more - is all contained in the phrase 'Eternal Rome'. Rome's own spiritual experience, the union of that experience with the rest of Mediterranean civilisation, and the resulting new creation offcred the framework within which lay the fortunes of humanity Destroy those 'thought-forms', destroy the old culture of which the old gods were a part, and humanity was doomed.

This was the challenge which Christian writers and thinkers had to take up, and in taking it up they found themselves much embarrassed, and chiefly for two reasons. In the first place, they were themselves the product – and often the finest product – of Greco-Roman civilisation; and to think beyond it and outside it implied a supreme effort of thought and will. Secondly, they owed to it the very tools with which they were going to criticise, and many of them loved pagan literature with real devotion. Thus, they were engaged upon the difficult task of an intellectual and emotional reorientation.

The point is capable of illustration from many angles; but it must suffice to consider only St Augustine, the supreme example

Before he became a Christian, St Augustine was a teacher of rhetoric in Italy; he knew Roman literature well; he had read much Greek literature and philosophy in Latin translations. He was thoroughly conversant with the literary and philosophic discussions of his time; he had been deeply influenced by Manicheism, and by neo-Platonism After his conversion he had hoped to live a monastic life; but he found himself exalted to the care and responsibilities of a bishopric in his native country, Africa. In A.D. 410, Alaric, King of the Goths, invaded Italy, captured Rome, and withdrew. Refugees fled to the southern coasts of the Mediterranean, bringing the news with them The shock to the Roman world was stupendous; it seemed that civilisation was to fall in ruins. The panic grew less as it became clear that Rome still stood, and that things were going on much as beforc, for the damage to the city was not great, the barbarrans had behaved with unexpected moderation. The shock to sentiment remained. If Rome had been true to her ancient gods, this catastrophe would never have happened. Such was the indignant and frightened plea of the champions of Roman culture

In AD. 413, St Augustine began to write his work On the City of God, and he finished it in AD 426, though portions of it appeared successively between these dates. It was a work prompted by the times, and its pilmary purpose was to give guidance in their interpretation. The scope of its twenty-two books cannot be indicated here; but three points must be made.

First, Books 1-x are devoted to the refutation of the charge that the evils of the world are to be attributed to the ban laid upon pagan worship by the Christians, and by the Christian Roman Empire. For this purpose Roman history is put under scrutiny, and the conclusion is that the Roman gods did not in fact save Rome in other crises, and by their very character were incapable of saving her. Nor can the Roman gods offer anything of guarantee to the individual soul for the life to come.

This last argument is directed against those pagans who, though not blaming Christianity for recent imperial disasters, yet thought that the old cults offered positive benefit for the future. Now St Augustine, writing a tract for the times, was not likely to fight with shadows; indeed, we are told that some pagans contemplated publishing a reply. In other words, he was fighting a powerful and widespread belief that only the maintenance of ancient cults and the culture associated with them could save civilisation.

In the second place, St Augustine is a profound admirer of the Roman achievement in history and of the Roman virtues, through which that achievement had been won. Of this he leaves no shadow of doubt. Not only does he say so constantly, but all his writings are soaked through and through with classical thought, with copious illustration and reference; indeed, his point of departure is often the correct orthodox standpoint of paganism. What he does criticise in Roman character is precisely the element which he could not condone - materialism and cruelty and immorality. Whereas the pagans asserted that Roman character had made Roman history and Roman character was bound up with ancient religion, St Augustine admired much of Roman history, admired much of Roman character. but denied the necessary association of either with ancient religion. At the time this position was less intelligible than it might seem now; and his task was not easy. It was easier to take up Tertullian's position and to condemn outright the whole structure and thought of a civilisation derived from paganism. St Augustine did not choose this way. If he had chosen it, history would have taken a different course.

But the whole question was much more profound than so far appears. For the question of the gods of Rome was only one aspect of something much larger. Once again, perhaps, the point can be put shortly by referring to a passage in the same book, On the City of God. St Augustine has just reviewed the various kinds of 'good' which the different philosophies of the classical world had set up as the end to be pursued. They had regarded happiness as the chief end, and some had found happiness to consist in virtue, others in pleasure of different kinds, others in the satisfaction of elementary needs, and so on. 'If then the question be put to us what the City of God, if asked about all these matters one after the other, would reply, and, first, what its views are about the "cnds" of good and evil, it would reply that eternal life is the highest good and eternal death the highest evil; we must live rightly to obtain the one and to avoid the other. It is written "The righteous man lives by faith", for we do not see our good now, hence we must seek it in faith, nor is it possible for us to live anght out of our own resources, unless He helps our faith and our prayers who gives us the very faith to believe that help is available from Him.' 'Eternal life' is used in the sense in which it is used in the Fourth Gospel, 'life of a quality which is permanent' rather than 'life without end'.

This passage may perhaps indicate the contrast between the Christian and non-Christian point of view. Greco-Roman civilisation had found within the 'thought-forms' of its particular culture the final answer to humanity's needs; that is what is meant by 'Aeterna Roma'. For, though at first sight it may appear that in relying upon Roman gods for prosperity Rome was appealing to something outside herself, actually her appeal was made, as it always had been made, in order to put the gods into the way of favouring what the Romans themselves intended. The criticism which the

Christians make of pagan thought is that it regards man as sufficient of himself, that the world can be explained by the world; their own creed is that, unless man invokes a principle outside himself, he can find no solution of his problems. Thus, it is no longer a matter of securing the goodwill of the gods, for the successful achievement of what men will; but of doing the will of God, for its own sake, often in violation of what men. left to themselves, would will. That is the point at issue. as the Christians saw it. But that the difference was beyond compromise did not mean that learning was therefore to be cast aside (The point perhaps might be put shortly in this way, though this is not in St Augustine. Archimedes, when elaborating the theory of levels, had said that, if only he had a point of fulcrum outside the world, he would move the world. The Christian believed that Greco-Roman thought attempted to move the world from within and naturally failed; only Christianity offered the principle from outside.)

Thus St Augustine argued with the supporters of the old Roman worship. But on a lower plane he had another task to perform, which had engaged the powers of every Christian teacher for generations, he had to wrestle with the gods and vague powers (daemons) who possessed the minds of the less educated – the malign 'influences' of astrology, the power of 'fortune' and luck, the 'magic' of spiritualists, the terrors of half-remembered superstitions, the cults of a thousand and one little gods. These were the enslaving forces from which the masses had to be liberated. That many native gods took on a Christian guise as patron saints is well known, and the process can be watched in some detail But of all this no more can be said.

With St Augustine we have reached the last great name of antiquity. When he died in A.D. 430, the Van-

dals were overrunning Africa and were already at the gates of Hippo.

But there is one last word to be said. If the same barbarrans who overran great tracts of the Roman Empire in the fourth and fifth centuries A.D. had descended the peninsula of Greece in the fifth century B.C., in all probability they would have seen and appreciated little or nothing of the special characteristics of Athenian culture, and much might have been destroyed. When they descended the Italian peninsula eight or nine hundred years later, they found a civilisation which they could to some extent understand and appreciate, for part of it took the form of a massive grandeur of buildings, and roads and fortifications and ordered government. On the whole their aim was to appropriate rather than to destroy. But they had to be educated, and Latin literature was beyond their reach at the moment. Now the Romans from Cicero's time had shown a genius for composing manuals and encyclopaedias. The two most famous compilers were Varro and Pliny the Elder, and henceforth the influence of these writers was enormous in every mediaeval centre of learning. But in the sixth and seventh centuries these works were too ambitious and therefore one writer after another wrote shorter 'summaries' of departments of knowledge. These were to be the text-books for the education of the new Western nations; and such writers as Cassiodorus (fifth century) and Isidore of Seville (sixth century) and Boethius conferred incalculable benefits upon Western civilisation. As the nations grew up, they grew out of the elementary text-books, and they were able to go to Latin literature itself, stored away in libraries and monasteries and ecclesiastical centres of learning. Here they found the original Latin authors, and gained an introduction to Greek thought through Latin translations of Greek literature, till at last they were able to go to Greek literature itself.

The barbarian invasions were neither catastrophic and sudden, nor destructive and disruptive. Rome never fell, she turned into something else. Rome, superseded as the source of political power, passed into even greater supremacy as an idea; Rome, with the Latin language, had become immortal.

### CHAPTER XI

#### ROMAN LAW

Justice is the constant and perpetual will to give each man his right

Digest of Justinian

The greatest achievement of the Romans, whether we consider it on its own intrinsic merits or in its influence on the history of the world, is without doubt their law. 'There is not a problem of jurisprudence,' says Lord Bryce, 'which it does not touch: there is scarcely a corner of political science on which its light has not fallen.' 'What the American law needs most to-day,' says an American lawyer, 'is more of the invigorating eternal influence of Roman law.' And the same writer claims that, whereas the population of the Roman Empire may have been 50 millions, at present 870 million people live under systems traceable to Roman law.

It is naturally impossible to explain satisfactorily in a short chapter why Roman law is so supreme an achievement; yet not even the slightest book on the Romans should therefore dismiss the subject. None the less, the simplest account cannot help being difficult reading.

In AD. 527 Justinian became Emperor of the East Roman Empire, of which Constantinople was the capital. For a hundred years or so Italy had been under the control of 'barbarian' kings, Teutonic in origin. In the middle of the century Justinian's generals reconquered Italy, and till the twelfth century the East Roman Empire maintained some hold upon it.

Soon after his accession Justiman gave orders that Roman law should be codified. The codified Roman law was published in A.D. 533 and it applied to the East Roman Empire. When Italy was recovered, it became law there also and thus it became known to the West. Eventually schools and universities came into being very largely to study it. Justinian's great work is the Corpus Iuris Civilis, the Corpus of Civil Law, comprising the Code (imperial statutes), the Digest (jurisprudence), the Institutes (an elementary treatise), the Novellae (later enactments from Ad. 535 to 565)

The question is What were the qualities in Roman law which earned for it so great and permanent an influence? The answer to this question will throw light on the qualities of the men who elaborated this law.

The Digest opens with these words of Ulpian: 'Anyone intending to study law (us), should first know whence the word us is derived. It was named us from justice for, as Celsus aptly defined it, law is the art of the good and the fair. It is by virtue of this that a man might call us priests, for we worship justice, and we profess a knowledge of what is good and fair, separating the fair from the unfair, discriminating between what is allowed and what is not allowed, desiring to make men good not merely by fear of penalties but by the encouragement of rewards, we lay claim, unless I am mistaken, to a true philosophy, not a sham philosophy.' These seem at first sight strange words, yet they were written by one of the greatest minds of jurisprudence.

Law did in fact start with the priests, in Rome as elsewhere; and Justinian, after a thousand years of Roman law, claims that lawyers might well be regarded as priests of justice By 450 B.c. law was out of the hands of the priests customary unwritten law was now written down in the Twelve Tables. They were published in the forum, and they contained the law relating to Roman citizens, *sus civile*. For three hundred years the Twelve Tables were interpreted, and the new situations which

arose as Rome grew were met by logical deductions expanding the laws, or by legal fictions which kept the letter and enlarged the spirit. Less than a hundred years after the publication of the Twelve Tables a special magistrate was appointed to relieve the consuls of their judicial powers. He was the praetor. In 242 B.C. another praetor was appointed to deal specially with relations between citizens and foreigners; he was called the *praetor peregrinus*. At later dates the number was increased.

Now it must be noted (1) that the practor was above the law, (ii) that the fact that foreigners (Italians were foreigness) and Roman citizens did business together and were ready to refer disputes to the praetor peregrinus presupposed some likeness between the Roman and the foreign conceptions of law, though not enough to make a special judge unnecessary, (iii) that the praetor in banus and the praetor peregrinus were required to publish at the beginning of their year of office a statement of the rules (edictum) which would guide them in their interpretation of the law of the Twelve Tables, (iv) that the practors were elected by popular vote and were not necessarily lawyers, though knowledge of law became increasingly a qualification for office But it is a feature of Roman public life that all holders of office sought advice: the Emperors later similarly sought advice On these things hangs much of the strength of Roman law.

The practor was above the law He could not annul the existing law of the Twelve Tables, but by the framing of his edict and by his day-to-day decisions he could supplement it, or he could reform it by granting remedial relief; the law stood, but he could make a way round. The practor peregrinus had to deal with foreigners not bound by Roman law; his task was to create out of the customs of Romans and the customs of foreigners a law acceptable to both. It was likely to be wider in

scope and less bound by local or national traditions, it had to satisfy men as men, not men as citizens of this or that state. The *praetor urbanus* thus built up the law of citizens, *sus civile*; the *praetor peregrinus*, who would draw on the *sus civile* but would enlarge it by non-Roman law, built up the 'law of the nations', *sus gentum*.

The practor was appointed annually. It was therefore convenient for him to take over the edict of his predecessor, if he wished; but he could adapt it at the outset, and he could enlarge or modify it during his office. It was in a state of perpetual growth; it was alive: 'cdictal law is the living voice (viva vox) of the civil law'. Fresh minds were constantly at work on it.

In course of time Romans and Italians had more to do with one another, till in 89 B.C. all Italians were made Roman citizens. But hitherto they had come under the *ius gentium*, administered by the *praetor peregrinus*, which was wider and more equitable than the citizens' law; and the citizens had learned something of the nature of the *ius gentium*. So Italians, when they became citizens, were not likely to accept anything less wide, and existing Roman citizens were ready to accept something wider. The result was that by a gradual process the civil law approached the wider law of the nations. But of course citizenship involved much that was refused to foreigners: and the superseding of civil law by *ius gentium* did not take place till the second and third centuries A.D.

Meantime, the provincial governor also issued his edict to run in his province. He had held office in Rome and he knew something of law. He studied the edict of his predecessor, and modified it in the light of his experience. He had to take into account local custom and prejudice, the habits of mind of his provincials; yet Roman notions of law and order must prevail. He might pass to another

province where conditions would be different. He must make the right adjustments in his attitude, taking local differences into account. Yet Roman notions of law and order must prevail. And, when he came back to take his place in the Senate, his experience was worth much; a council of state composed of men with such experience has indeed been rare in history.

We have reached 89 B.C., and the answer to our question must take note of these points: (1) the expansion of Rome and the growth of foreign trade and relations brought into being the conception of a 'law of nations', and necessitated its expression in concrete form, (ii) this law affected and eventually superseded the older 'law of the citizens'; (iii) the process of development implied in (i) and (ii) was made possible by the device of 'edictal law', the 'living voice'; development was not stunted or delayed, but was initiated by a magistrate, himself above the law. So far, then, we have (a) a capacity for change and development, (b) a conception of law which takes account of men as men, and not only of citizens under a national law.

We now pass to the period of the Empire, though we shall glance back to the Republic. Under the Republic (except during the last years) the Senate's decisions were not law, but were only recommendations to the popular assembly. Under the early Empire the law-making powers of the popular assemblies were virtually transferred to the Senate From the reign of Tiberius to Septimius Severus the Senate made law, though only such law as the Emperor approved. The edictal law of the praetor continued to grow. But in the reign of Hadrian it was consolidated and codified and came to an end. With the age of the Antonines, the Emperor's legislative power superseded all else His 'edict' was a general ordinance, his 'decree' was a judgement in a

suit submitted to him; his 'rescript' was his opinion on a point of law. All of them made law.

Thus the whole tendency was to concentrate law-making power in the Emperor's hands. The 'living voice' of edictal law was silenced; the Senate was subservient. The distinction between civil law and the law of nations was (for practical purposes) obliterated when Caracalla bestowed citizenship on the Roman world in Add. 212. Yet the period from Trajan to Septimus Severus, that is, the period when law-making power is increasingly concentrated in the Emperor's hands, is the age of Classical Roman Law, the age in which two of the influences which transformed it into a timeless world law were most potent. These influences came from (1) the jurisconsults; (ii) philosophy

During the last seventy years or so of the Republic the study of law was earnestly pursued by a number of able and educated men, most of whom brought to their studies a practical experience of office at home and of administration in the provinces. Some were actively engaged in practice in the law-courts, others were men of letters who wrote upon legal subjects. They were 'skilled in the law', surseprudentes or surseconsults. In an age when public life and problems of home and provincial administration occupied the best minds of the day, knowledge of law was in demand These 'jurispiudents' were freely consulted and they gave 'opinions' to those who consulted them Their 'answers' problems were ficely quoted and published and they carried great weight, since they came from men of intellect, learning and practical experience. Such men were Q. Mucius Scaevola, M. Junius Brutus (not the assassin of Julius Caesar), Servius Sulpicius Rufus, Cicero himself was an advocate rather than a jurist.

Such a position had these sursprudentes reached in

public estimation, so great was their reputation for wisdom and integrity, so great the respect for 'authoritative opinion' that Augustus gave to certain of them the 'right to answer' problems put to them, and their opinions carried weight with the judge to whom the case might go. Thus they helped to make law They were 'heensed consultants'. For two centuries they thus gave 'answers'. But their influence was great in other ways. They were regularly consulted by the Emperors, and Hadrian indeed formed a judicial council to help him in matters of law. They put out an enoimous quantity of legal writings, and their aphorisms passed into current coin, as e.g. 'Follow the beneficial interpretation'.

The second influence was philosophy. Greek philosophy had considered with some care the distinction between what was conventional (nomos), arbitrary, fixed by human habits and crystallised into law, and what was natural (physis), determined by Nature according to a large and universal code and smothered by ages of man-made regulations. It was the travels of the Greeks which really started this speculation, for they came across different customs in different lands, yet realised that there was some vague and remote resemblance as though all had come from some common source. This idea of a universal nature was taken up by the Stoics, whose cardinal doctrine was that men should live 'according to Nature', i.e according to the reason which Nature had implanted in man as man and accoiding to the larger Reason which animated the world as a whole. Moreover, in Hellenistic thought there had been doctrines of the unity of mankind, and of the duty of the king to look after and serve the interests of his subjects as Saviour and Benefactor and to bring all peoples under such a kind of government. 'Nature' therefore had its laws; Reason in Nature was their source; and these laws were outside and beyond man.

Now the Romans had already arrived at the notion of an unwritten 'law of nations' through their dealings with foreigners. The urisprudentes were educated men. of wide knowledge of literature and of philosophy, and they were instructively drawn to Stoicism with its stress on standards of conduct. It was they who began to equate the 'law of nations' with the 'law of Nature', and to believe that the law of nations was a faint approximation to the 'law of Nature'. The aim of law thus was to move closer to the objective standards enshrined in the laws of Nature which were based on reason which in turn was the reason, not of one man or one nation. but of man as part of Nature. This was the point of view of the iurisprudentes for over two hundred years: and the result was that in all their labours of making law, of amending and interpreting existing law, they had a norm or a criterion to guide them, the ideal of natural justice, of an objective good, more sublime and more comprehensive than any of man's devising, which lawyer and philosopher would strive to discover and to embody progressively in the laws of the Roman Empire.

Thus we are brought back to the opening words of the Digest quoted earlier in this chapter. 'The art of the good and the fair', 'desiring to make men good by the encouragement of rewards', 'separating the fair from the unfair'. 'We worship justice', and in a new sense the lawyers were 'priests', concerned with absolute and eternal values, valid for all men at all times and in all places, which they strove to express in the form of 'equity' for the use of mankind.

But Roman law was not yet in such form that it could be serviceable to mankind; it was of enormous bulk. We may omit minor attempts at codification in the third and fourth centuries, and come at once to the Theodosian Code which went into effect in A.D. 439. This Code was an official collection of the Emperors' Statutes, and contained none of the writings of the jurists It is of great value to us, for it gives a picture of the activities of the Christian Emperors, and of the social conditions of the day, it exerted no little influence on the 'barbarian' codes. For, when successive barbarian races overran the West, and Italy was subject to a foreign government, the barbarians incorporated into their own legal codes great masses of Roman law. Thus the Edict of Theodoric (A.D. 500) bound Roman and Ostrogoth: the Code of Alaric II, the Visigoth, was framed in A.D. 506, and based on the Theodosian Code, on the Sententiae of Paulus the jurist, and on the Institutes of Gaius and from it Western Europe derived much of its knowledge of Roman law. There was also the Lex Romana of the Burgundians (A.D. 517). But the Code of Theodosius was not enough.

The great codification was that of Justinian, as we have seen It included imperial statutes and it also distilled the writings of the Jurists, what was obsolete was omitted, and the whole was arranged in magnificent order Justinian claimed that three million lines of jurisprudential law had been reduced to a hundred and fifty thousand of the Digest, 'a moderate compendium through which you can easily see your way' (moderatum et perspicuum compendium). But into it had entered a thousand years of practical wisdom, and that wisdom had passed through Roman minds. There were no violent innovations. The compilers of the Digest looked back over the centuries of Roman law and conceived their work as being part of the orderly progress initiated by the infant Republic.

#### EPILOGUE

Tills book began by inviting attention to the sense of self-subordination which marked the Roman mind. 'Because you bear yourself as less than the gods, you rule the world.' In a thousand years the Romans had been schooled as no other nation, and they had kept that sense of subordination. None the less, no other nation achieved an Empire so far-reaching and so fundamentally humane. Through obedience comes power. The great gift of Roman obedience flowered in due time into the great ideals of Roman law. By learning at infinite cost that lesson Rome has set those ideals upon succeeding ages. The Romans were 'a law-inspired nation', but the law was of their making and they imposed it on themselves And, as the fundamental ideas of that law are studied, they will be found to enshrine the ideals and qualities which the Romans of the earliest times set before themselves, now broadened and refined and made of universal application. Respect for eternal values, the will of the gods (pietas), and their expression as objective 'right' in the practical things of human life – respect for human personality and human relationships (humanitas), whether in the family of the state or the circle of friends, springing from a regard for the personality of each individual and issuing in the maintenance of his freedom (libertas) - respect for tradition (mores) that holds fast to what has been handed down because it contains accumulated wisdom which no one moment and no one man can supply - respect for authority (auctoritas), not as obedience to superior power, but as regard for the judgement of men whose experience and knowledge deserve respect – respect for the pledged word (fides) and the expressed intention, the faith of the Romans by which 'with their friends and such as relied on them they kept amity', and 'the most sacred thing in life'.

Respect for these things presupposed training (disciplina), the training of the home, of public life, of life itself, and the training which comes from the self (seventas). And training of this kind creates a responsible cast of mind (gravitas) which assigns importance to important things, so that, when once the hand is placed to the plough, a man does not look back and falter, but keeps to his purpose (constantia). These are the qualities which make up the genius of the Roman people

## DATES

753	Foundation of Rome (traditional)	
510	Expulsion of the Kings	
451	The Twelve Tables	427-348 Plato
390	Sack of Rome by the Gauls	384-322 Aristotle
367	Praetor urbanus	356~323 Alexander the Great 300 ft Zeno 300 ft Euclid, Aristarchus 272 Livius Andronicus
262-242	First Punic War	brought to Rome 240 ft Naevius
242	Praetor peregrinus	239-169 Ennius
236-183	Scipio Africanus	c 250–184 Plautus
234-149	Cato the Elder	
218-202	Second Punic War	160 ft Terence
133	Scipio Aemilianus  d Tiberius Gracchus  d Caius Gracchus	c 202–c 120 Polybius
113-101	Teutones and Cimbri threaten Italy	
106-43	Cicero	
102-44	Julius Caesar	135-51 Poseidonius
89	Allies' War	
86-78	Constitution of Sulla	c 55 Lucrenus died

### THE ROMANS

THE ROMANS 221			
66-62	Pompey in the East	116-27 Varro	
63	Cicero's consulship		
58-49	Caesar in Gaul		
44	Murder of Caesar	70–19 Vergil	
31	Battle of Actium	65-8 Horace 64-AD 19 Strabo	
97- AD 14	Principate of Augustus	59-A D 17 Livy 43-A,D 18 Ovid	
A.D. 9	Defeat of Varus		
14-37	Tiberius		
37-41	Caius (Caligula) Julio-	una fa Sanana	
41-51	Claudius	4 B C -65 Seneca	
54-68	Nero	d 65 Petronius	
69	Year of the Four Emperors	23-79 Pliny the Elder	
69-79	Vespasian	70 Capture of Jerusalem by Titus	
79-81	Titus Flavians	c qo Epictetus	
81-96	Domitian	35-95 Quintilian c 97 Frontinus 46-120 Plutaich	
96-98	Nerva	55-120 Tacitus	
98-117	Trajan	62-113 Plmy the Younger	
117-138	Hadiian	65-140 Juvenal	
138–161	Antoninus Pius	75-160 Suctonius	
161-180	M. Aurelius Antonines	160 fl Apuleius	
180-193	Commodus		
193-211	Septimus Severus	200 / Tertullian 212 Caracalla gave Roman	
922-235	Alexander Severus	citizenship 228 Ulpian died	

249-251 Decius

284-305 Diocletian

306-337 Constantine

361-363 Julian

379-395 Theodosius I (West)

313 Edict of Milan

265-340 Eusebius

325 Council of Nicaca

330 Foundation of Constantinople

340-420 St Jerome

354-430 St Augustine

384 Symmachus, prefect of the City

404 Last poem of Claudian

410 Sack of Rome by Alaric

413 Rutilius Claudius Namatianus, prefect of the City.

c 420 Vegetius

438 Theodosian Code

455 Sack of Rome by Vandals

522 Reconquest of Italy by Justinian

533 Promulgation of the Digest

527-565 Justinian (East)

# REGINE

Actium, 58 80	Consu., 10
Aemilius Paulus, 68	Currency, 175
Arneas, 36, 106	Cybele, 146, 200
Agricola, 128	
Alexander, 37, 80	Decrus, 185
Alimenta, 105	Diarchy, 83
Allies' Wir, 40, 58	Dido, 36, 123
Ambrose, St, 195	Diocletrin, 107, 168, 173 ff , 186 f. 19
Antoninus Prus, 90, 106	Discharge paper, 91 ff
Antonius, Marcus, 58, 69	Domitian, 90
Apulcius, 100	T 1. 0 . 0 . 0
Arcidius, 192	Emperor, cult of, 151 ff, 183
Architecture, 136 f	Emperors, 89, 90 and see 221
Aristotle, 66	Encyclopaedias, 207
Army, 40, 54, 55, 58, 74, 91, 168 ff	Ennius, 24, 62, 117
Army, 40, 54, 55, 58, 74, 91, 168 ff, 174 f, 193 ff	Epic, 117, ch iv
Atticus, 72	Epictetus, 159
Augustine, St, 116, 120, 195, 199, 202 ff	Epicureanism, 151 ff
Augustus, 41, 42, 45, 57, 58 81, 83, 84 f,	Etruscans, 31 f
97, 101, 133, 148, 178, 183, 192	D-1
Auspices, 13	Fabius Maximus, Q, 35
	Felix, 101
Barbarians', 168 ff', 208	Festus, 181
Boethius, 207	Fronto, 100, 120
	Calen tos tro
C tesar, Julius, 41, 56, 57, 62	Galen, 138, 140 Games, 107 f
Caus (Caligula), 89, 90	- ' '
Cannae, 35	Genius, 19 ff
Caracalla, 90, 185, 194, 214	Gracchus, Caius, 54 Gracchus, Tiberius, 53, 69
Carthagmans, 31, 33 ff	
Cassiodorus, 207	Greeks, 59, 62 f, 65 f, 68, 116, 137 ff See also Hellenistic Culture
Cato, M Porcius, the Elder, 61, 63 ff, 162	Goths, 170, 192
Cato, M Porcius, the Younger, 74	dod:5, 170, 192
Catullus, 119	Hadrian, 90, 92, 97, 106, 159, 215
Cicero, 24, 69 ff, 109, 142, 155 ff, 192, 215	Hamilcar, 34, 35
Cincinnatus, 62	Hannibal, 35, 36, 61, 80
Citizenship, Municipal, 96	Hasdrubal, 61
Citizenship, Roman, 40, 51, 58, 91,	Hellenistic Culture, 37, 80 f
193 f , 214	Hero, 138 f
City Life, 94 ff, 134 ff	History, 87 f
Civil Service, 96 ff	Honorius, 192
Claudian, 131, 199	Horace, 24, 84, 85, 115, 121, 127, 197
Cleopatra, 58, 80	Humanitas, 12
Clubs, 103	214/16/1940/ 12
Coms, 106	Inscriptions, 90, 104, 114
'Collegiality', 46, 57	Invention, 137 ff.
Columella, 100, 118	Isidore, 207
Comedy, 119	Italy, 30 ff , 133
Commodus, go	
Constantine, 168, 173 ff, 187 ff	Jerome, St, 200
Constantinople, 177	Jews, 39, 179 ff

## Central Bureau-of Textbook Research

## LIBRARY

Roads, 136 Kings, 27 .40 Knights, 72 Land, 130 f Sature, 118 Latin, 122 Science, 137 ff I aw, ch xi, 18, 165 of nations, 211 ff of nature, 216 Letters, Cicero's, 77 ff Pliny's, 110 ff. 155 Roman, 120 Senate, 46, 51, 70 Literacy, 115 Livius Andronicus, 62 Sencca, 100, 157 fF Livy, 84, 100, 117 ff Lucretius, 121, 150 if Magistracy, 43 Societies, see Clubs Majorian, 193 Stoicism, 155 ff Marcus Aurelius, 90, 99, 120, 160 ff , 170 Strabo, 139 Marius, 40, 55 Suetonius, 90, 119 Martial, 100 Sulla, 39, 41, 55 f Milan, I dict of, 187 Mithras, 150, 200 Mithridates, 39 Moral qualities, 17 ff , 22 ff , 219 Taxes, 175 f

Naevius, 117 Nero, 89 f., 183 Nerva, 90, 105

Octavianus, 144 Augustus Oratory, 120 f Ovid, 119, 121

Paul, St. 181, 194
Petronius, 103
Philosophy, 215
Plautus, 119
Phny the Elder, 98, 115, 207
Phny the Younger, 109 ff, 120, 103
Polybius, 14, 155
Prompey, 39, 55 f
Pro-consul, 53
Propertius, 119
Pro-magistracy, 43 f
Provinces, 41, 52, 57, 58
Ptolemy, 138

Quintilian, 100

ans, foreign, 145 ff , 182, 200 ff Roma Acterna, 205 Rutilus Claudius Namatianus, 197 ff Scipio Africanus, P Cornelius, 35, 61 ff. Scipio Aemilianus, P Cornelius, 61, 67 ff. Senator, 71, 73, 83, 1921 Septimius Severus, 90, 185 Severus Alexander, 90 Slavery, 73, 100 ff, 165 Symmachus, 13, 120 Tacitus, 12, 119, 125, 128 Terence, 119 Terentia, 78 Tertullian, 12, 184, 199, 204 Theodosius, 188, 196, 217 Tiberius, 41, 89 f T110. 78 Titus, go Trade, 98 ff Tragedy, 119 Trajan, 90, 106, 184 Travel, 98 f Tribune, 48

Ulpian, 210 Valenan, 185

Vandals, 206, 207 Varro, 207 Vergil, 36, 84 ff, 115, 118 ff, 123, 132

Vespasian, 89, 97, 109

Zama, 35, 67 Zeno, 154 Zenobia, 171

# TROVEHELMPERIAL

Sa Mertiner Whieler

3 137